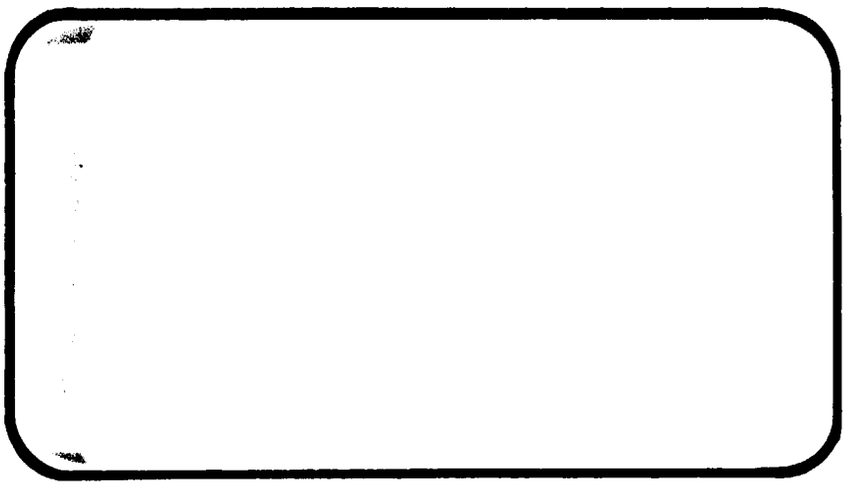
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

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# SPACE SHUTTLE

# AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANagement services
SPACE DIVISION CHRYSLER CORPORATION

October, 1975

DMS-DR-2194
NASA CR-141,819

# RESULTS OF A PRESSURE LOADS INVESTIGATION ON A 0.030-SCALE MODEL (47-OTS) OF THE INTEGRATED SPACE SHUTTLE VEHICLE CONFIGURATION 5 IN THE NASA AMES RESEARCH CENTER 9 x 7 FOOT LEG OF THE UNITARY PLAN WIND TUNNEL (IA81B)

VOLUME 3 OF 5

by

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Shuttle Aero Sciences
Rockwell International Space Division

Prepared under NASA Contract Number NAS9-13247

by

Data Management Services
Chrysler Corporation Space Division
New Orleans, La. 70189

for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

| | |
|---|---|
| Test Number: | ARC 97-019 |
| NASA Series Number: | 1A81B |
| Model Number: | 47-OTS |
| Test Dates: | August 6-22, 1974 |
| Occupancy Hours: | 208 |

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Chrysler Corporation Space Division assumes no responsibility for the data presented other than display characteristics.

# RESULTS OF A PRESSURE LOADS INVESTIGATION ON A 0.030-SCALE MODEL (47-OTS) OF THE INTEGRATED SPACE SHUTTLE VEHICLE CONFIGURATION 5 IN THE NASA AMES RESEARCH CENTER 9 x 7 FOOT LEG OF THE UNITARY PLAN WIND TUNNEL (IA81B)

by

E. Chee, Rockwell International Space Division

## ABSTRACT

Presented in this report are results of wind tunnel test IA81B. The model tested was a 0.030-scale model of the Integrated Space Shuttle Vehicle Configuration 5. Testing was conducted in the NASA Ames Research Center 9 x 7-foot Unitary Plan Wind Tunnel to investigate pressure distributions for aeroloads analysis at Mach numbers from 1.55 through 2.5. Angles of attack and sideslip were varied from -6 to +6 degrees.

This report consists of 1 volume of force data and 4 volumes of pressure data for a total of 5 volumes. They are arranged in the following manner:

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| 2 | IA81B plotted pressure data | |
| 3 | IA81B tabulated pressure data | |
| | (a) orbiter fuselage | pages 1-299 |
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| 4 | IA81B tabulated pressure data | |
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| | (b) right lower wing surface | pages 1188-1299 |
| | (c) right upper wing surface | pages 1300-1459 |
| 5 | IA81B tabulated pressure data | |
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PLOTTED COEFFICIENTS SCHEDULE:

A) CAF, CNF, CLMF versus ALPHAI
CNF versus CLMF

B) CY, CYNF, CBL versus BETAI
CY versus CYNF
CY versus CBL

C) CHEO, CHEI versus ALPHAO

D) CABO versus ALPHAO

E) CABET versus ALPHAT

F) CABSRB versus ALPHAL

G) CABSRB versus ALPHAR

H) CAFAFO versus MACH

I) XAC/LV versus MACH

J) CNALFA versus MACH

K) YAC/LV versus MACH

L) CYBETA versus MACH

M) CHEO, CHEI versus MACH

N) DCAF, DCNF, DCLMF versus MACH

O) CP versus X/LB

P) CP versus X/LT

Q) CP versus X/LS

R) CP versus X/CV

S) CP versus X/CW

NOMENCLATURE
General

| SYMBOL | PLOT SYMBOL | DEFINITION |
|---|---|---|
| a | | speed of sound; m/sec, ft/sec |
| $C_p$ | CP | pressure coefficient; $(p_l - p_\infty)/q$ |
| M | MACH | Mach number; V/a |
| p | | pressure; $N/m^2$, psf |
| q | q(NSM) q(PSF) | dynamic pressure; $1/2\rho V^2$, $N/m^2$, psf |
| RN/L | RN/L | unit Reynolds number; per m, per ft |
| V | | velocity; m/sec, ft/sec |
| $\alpha$ | ALPHA | angle of attack, degrees |
| $\beta$ | BETA | angle of sideslip, degrees |
| $\psi$ | PSI | angle of yaw, degrees |
| $\phi$ | PHI | angle of roll, degrees |
| $\rho$ | | mass density; $kg/m^3$, $slugs/ft^3$ |

Reference & C.G. Definitions

| | | |
|---|---|---|
| $A_b$ | | base area; $m^2$, $ft^2$ |
| b | BREF | wing span or reference span; m, ft |
| c.g. | | center of gravity |
| $\ell_{REF}$ $\bar{c}$ | LREF | reference length or wing mean aerodynamic chord; m, ft |
| S | SREF | wing area or reference area; $m^2$, $ft^2$ |
| | MRP | moment reference point |
| | XMRP | moment reference point on X axis |
| | YMRP | moment reference point on Y axis |
| | ZMRP | moment reference point on Z axis |

SUBSCRIPTS

| | |
|---|---|
| b | base |
| l | local |
| s | static conditions |
| t | total conditions |
| $\infty$ | free stream |

NOMENCLATURE (Continued)

Body-Axis System

| SYMBOL | PLOT SYMBOL | DEFINITION |
|---|---|---|
| $C_N$ | CN | normal-force coefficient; $\frac{\text{normal force}}{qS}$ |
| $C_A$ | CA | axial-force coefficient; $\frac{\text{axial force}}{qS}$ |
| $C_Y$ | CY | side-force coefficient; $\frac{\text{side force}}{qS}$ |
| $C_{A_b}$ | CAB | base-force coefficient; $\frac{\text{base force}}{qS}$ $-A_b(p_b - p_\infty)/qS$ |
| $C_{A_f}$ | CAF | forebody axial force coefficient, $C_A - C_{A_b}$ |
| $C_m$ | CLM | pitching-moment coefficient; $\frac{\text{pitching moment}}{qSl_{REF}}$ |
| $C_n$ | CYN | yawing-moment coefficient; $\frac{\text{yawing moment}}{qSb}$ |
| $C_l$ | CBL | rolling-moment coefficient; $\frac{\text{rolling moment}}{qSb}$ |

Stability-Axis System

| | | |
|---|---|---|
| $C_L$ | CL | lift coefficient; $\frac{\text{lift}}{qS}$ |
| $C_D$ | CD | drag coefficient; $\frac{\text{drag}}{qS}$ |
| $C_{D_b}$ | CDB | base-drag coefficient; $\frac{\text{base drag}}{qS}$ |
| $C_{D_f}$ | CDF | forebody drag coefficient; $C_D - C_{D_b}$ |
| $C_Y$ | CY | side-force coefficient; $\frac{\text{side force}}{qS}$ |
| $C_m$ | CLM | pitching-moment coefficient; $\frac{\text{pitching moment}}{qSl_{REF}}$ |
| $C_n$ | CLN | yawing-moment coefficient; $\frac{\text{yawing moment}}{qSb}$ |
| $C_l$ | CLL | rolling-moment coefficient; $\frac{\text{rolling moment}}{qSb}$ |
| L/D | L/D | lift-to-drag ratio; $C_L/C_D$ |

NOMENCLATURE (Continued)
Additions to Standard Nomenclature

| Symbol | Plot Symbol | Defintion |
|---|---|---|
| $A_{b_{ET}}$ | | external tank base area, $ft^2$ |
| $A_{b_f}$ | | body flap upper surface area, $ft^2$ |
| $A_{b_o}$ | | Orbiter base area, $ft^2$ |
| $A_{b_{OMS}}$ | | OMS pod base area, $ft^2$ |
| $A_{b_{SRB}}$ | | SRB base area, $ft^2$ |
| $C_{A_{b_{ET}}}$ | CABET | external tank base axial force coefficient |
| $C_{A_{b_o}}$ | CABO | Orbiter base axial force coefficient |
| $C_{A_{b_{SRB}}}$ | CABSRB | SRB base axial force coefficient |
| $C_{A_{ET}}$ | | external tank total axial force coefficient |
| $C_{A_{f_{ET}}}$ | | external tank forebody axial force coefficient |
| $C_{A_{f_o}}$ | | Orbiter forebody axial force coefficient |
| $C_{A_{f_{SRB}}}$ | | SRB forebody axial force coefficient |
| $C_{A_o}$ | | Orbiter total axial force coefficient |

NOMENCLATURE (Continued)

| Symbol | Plot Symbol | Definition |
|---|---|---|
| $C_{P_{b_{OMS}}}$ | | OMS pod average base pressure coefficient |
| $C_{P_{b_{SRB}}}$ | | SRB average base pressure coefficient |
| $C_{P_i}$ | | pressure coefficient associated with $i^{th}$ tap |
| ET | | external tank |
| $i_{b_c}$ | | Oribter base incidence angle to a line of constant $X_o$, deg. |
| $\ell_b$ | | Orbiter fuselage length, in. |
| MRP | | moment reference point |
| OMS | | orbital manuvering system |
| RN/FT | RN/L | unit Reynolds number, million per foot |
| $S_e$ | | elevon surface area, $ft^2$ |
| SRB | | solid rocket booster |
| $X_{bf}$ | | longitudinal distance from MRP to bodyflap area centroid, in. |
| $X_{b_c}$ | | longitudinal distance from MRP to Orbiter base area centroid, in. |
| X/C | X/CW | chordwise location on wing |
| X/Cv | X/CV | chordwise location on vertical tail |
| $X_o$ | | Orbiter longitudinal station, in. |
| $X_o/L_o$ | X/LT | location on Orbiter, fraction of Orbiter body length aft of Orbiter nose |

NOMENCLATURE (Continued)

| Symbol | Plot Symbol | Definition |
|---|---|---|
| $C_{A_{SRB}}$ | | SRB total axial force coefficient |
| $\bar{C}_e$ | | elevon mean aerodynamic chord, in |
| $C_{h_{e_I}}$ | CHEI | inboard elevon hinge moment coefficient |
| $C_{h_{e_o}}$ | CHEO | outboard elevon hinge moment coefficient |
| $C_{m_{bf}}$ | CMBF | bodyflap upper surface pitching moment coefficient |
| $C_{m_{b_o}}$ | CMBO | Orbiter base pitching moment coefficient |
| $C_{m_{f_o}}$ | | Orbiter forebody pitching moment coefficient |
| $C_{m_o}$ | | Orbiter total pitching moment coefficient |
| $C_{n_{bf}}$ | | bodyflap upper surface normal force coefficient |
| $C_{N_{b_o}}$ | | Orbiter base normal force coefficient |
| $C_{N_{f_o}}$ | | Orbiter forebody normal force coefficient |
| $C_{N_o}$ | | Orbiter total normal force coefficient |
| $C_{P_{b_{ET}}}$ | | external tank average base pressure coefficient |
| $C_{P_{bf}}$ | | bodyflap average upper surface pressure coefficient |

NOMENCLATURE (Continued)

| Symbol | Plot Symbol | Definition |
|---|---|---|
| $C_{P_{b_o}}$ | | Orbiter average base pressure coefficient |
| $X_S$ | XS | SRB longitudinal station, in. |
| $X_S/\ell_S$ | X/LS | location on SRB, fraction of SRB body length aft of SRB nose |
| $X_T$ | XT | external tank longitudinal station, in. |
| $X_T/\ell_T$ | X/LT | location on ET, fraction of ET body length aft of ET nose |
| $Y_o$ | YO | Orbiter lateral station, in. |
| $Y_S$ | YS | SRB lateral station, in. |
| $Y_T$ | YT | external tank lateral station, in. |
| $Z_{b_o}$ | | vertical distance from MRP to Orbiter base area centroid, in. |
| $Z_o$ | ZO | Orbiter vertical station, in. |
| $Z_s$ | ZS | SRB vertical station, in |
| $Z_T$ | ZT | external tank vertical station, in. |
| $\alpha_o$ | ALPHAO | Orbiter angle of attack, degrees |
| $\alpha_{S_L}$ | ALPHAL | left SRB angle of attack, degrees |
| $\alpha_{S_R}$ | ALPHAR | right SRB angle of attack, degrees |
| $\alpha_T$ | ALPHAT | external tank angle of attack, degrees |
| $\beta_o$ | BETAO | Orbiter angle of sideslip, degrees |

NOMENCLATURE (Continued)

| Symbol | Plot Symbol | Definition |
|---|---|---|
| $\beta_{B_L}$ | BETAL | left SRB angle of sideslip, degrees |
| $\beta_{S_R}$ | BETAR | right SRB angle of sideslip, degrees |
| $\beta_T$ | BETAT | external tank angle of sideslip, degrees |
| $\delta_{e_i}$ | ELV-IB | inboard elevon deflection angle, degrees |
| $\delta_{e_o}$ | ELV-OB | outboard elevon deflection angle, degrees |
| $\delta_R$ | RUDDER | rudder deflection angle, degrees |
| $\delta_{SB}$ | SPDBRK | speedbrake deflection angle, degrees |
| $\eta$ | 2Y/b | spanwise station, 2Y/b |
| $\phi$ | PHI | radial location, degrees |
| $C_{A_c}$ | | orbiter sting cavity axial force coefficient |
| $\beta_I$ | BETAI | integrated vehicle angle of sideslip, degrees |
| $\alpha_I$ | ALPHAI | integrated vehicle angle of attack, degrees |
| X/LB | X/LB | longitudinal position/body length (fuselage) |
| Y/BW | Y/BW | local spanwise position/wing span |
| Z/BV | Z/BV | local spanwise position/vertical tail span |

NOMENCLATURE (Continued)

| Symbol | Plot Symbol | Definition |
|---|---|---|
| $C_{n_f}$ | CYNF | forebody yawing moment coefficient, body axis system |
| $C_{m_f}$ | CLMF | forebody pitching moment coefficient |
| $C_{N_f}$ | CNF | forebody normal force coefficient |
| $C_{A_{f_o}}$ | CAFAFO | forebody axial force coefficient at zero alpha |
| $C_{N_\alpha}$ | CNALFA | derivative of normal-force coefficient with respect to alpha, per degree |
| $X_{cp}/\ell_v$ | XAC/LV | vertical tail chordwise center of pressure location |
| $Y_{cp}/\ell_v$ | YAC/LV | vertical tail spanwise center of pressure location |
| $C_{Y_\beta}$ | CYBETA | derivative of side-force coefficient with respect to beta, per degree |
| $\Delta C_{A_f}$ | DCAF | incremental forebody axial force coefficient |
| $\Delta C_{N_f}$ | DCNF | incremental forebody normal force coefficient |
| $\Delta C_{m_f}$ | DCLMF | incremental forebody pitching moment coefficient |
| CHM1 | CHM1 | contributions of the forward bridge to the inboard elevon hinge moment coefficient |
| CHM2 | CHM2 | contributions of the aft bridge to the inboard elevon hinge moment coefficient |
| CHM3 | CHM3 | contributions of the forward bridge to the outboard elevon hinge moment coefficient |
| CHM4 | CHM4 | contributions of the aft bridge to the outboard elevon hinge moment coefficient |

## NOMENCLATURE (Concluded)

### Data Set Identifiers

The fourth letter of the data set identifier indicates the component, e.g., RETT04.

Force

| | |
|---|---|
| O | Orbiter |
| T | External Tank |
| L | Left SRB |
| R | Right SRB |
| H | Orbiter - Hinge moment |
| I | Integrated Vehicle |

Pressure

| | |
|---|---|
| B | Orbiter Fuselage |
| L | Left Wing lower surface |
| U | Left Wing upper surface |
| W | Right Wing lower surface |
| R | Right Wing upper surface |
| V | Left Vertical Tail |
| S | SRM Booster |
| T | External Tank |
| C | Miscellaneous Orifices |

## CONFIGURATIONS INVESTIGATED

The model was a 0.030-scale representation of the Rockwell International Space Shuttle Integrated Vehicle. The Orbiter was per VL70-000140A/B lines. The external tank represented VL78-000063 lines. The solid rocket motors were per VL72-000066 lines. Figures 2a, b, and c present sketches of the model configuration. Model simulation included attach structure protuberances, fairings, fuel feed lines, vent lines, etc. (basic model construction was of ARMCO 17-4 steel).

Model forces and moments were measured by 3 Task Corporation six component balances. A 2.5 in. MK XXA was mounted in the Orbiter. A 2.0 in. MK IIIC was mounted in the external tank. A 1.5 in. MK IIC was mounted in the LH SRB. The balances are attached to stings entering each component through the base areas. Figures 2m and 2n show the balance locations in the model. The RH wing inboard and outboard elevon panels are instrumented with hinge moment gages as shown in figure 1c.

Surface and base pressures were measured on the Orbiter, external tank and solid rocket motors. The Orbiter was instrumented with a total of 480 pressure-orifices, of which 6 were base and cavity pressures. The external tank was instrumented with a total of 314 pressure orifices. The LH SRM was instrumented with a total of 149 pressure orifices. Orifice locations are presented in tables IV through VIII and figures 2d through 2 l.

The following model shorthand configuration notation was used:

$LVA' = AT_{28}$ thru $32\ FL_{10}\ FL_{11}\ FR_{10}\ N_{86}\ 0_1\ PT_{12}\ PT_{22\text{-}27}\ S_{21}\ T_{28}$

CONFIGURATIONS INVESTIGATED (Concluded)

$AT_{28 \text{ thru } 32}$ = Attach hardware structure

$FL_{10}$ = $LH_2$ feedline

$FL_{11}$ = $LO_2$ feedline

$FR_{10}$ = Umbilical door fairing

$N_{86}$ = Nozzles for solid rocket boosters

$O_1$ = $B_{26}\ C_9\ E_{44}\ F_9\ M_{16}\ N_{28}\ R_5\ V_8\ W_{116}$

$PT_{12}$ = Lightning rod on nose of $T_{28}$

$PT_{22 \text{ thru } 27}$ = External protuberance

$S_{21}$ = Solid rocket boosters

$T_{28}$ = External tank

Where model dimensions are as described in table III. The LVA' configuration was tested with speed brake gap both sealed and open and with elevon gap both sealed and open. The (instrumented) right elevon gap was sealed by a permanent sponge rubber seal. The left elevon gap was sealed with plaster. Speed brake gaps were sealed by red wax.

## TEST FACILITY DESCRIPTION

The Ames Research Center 9 by 7 foot Supersonic Wind Tunnel is a closed-circuit, air-medium, variable-density facility capable of attaining Mach numbers from 1.55 to 2.50 at Reynolds numbers from $1.5 \times 10^6$/ft to $6.5 \times 10^6$/ft. The 18 foot long test section is part of a dual system of supersonic circuits and uses the same motors and compressor as the 8 by 7 foot tunnel. A sliding-block throat arrangement is used to control tunnel Mach number.

Models are supported by means of stings attached to the wall-to-wall strut/BOR system of the 9 by 7 foot tunnel.

Schlieren photograph, shadowgraphs, and pressure monitoring instrumentation are available.

## DATA REDUCTION

All balances data were reduced to coeffi ients about a moment reference point located at:

$X_T$ = 976.0 in.

$Y_T$ = 0.0 in.

$Z_T$ = 400.0 in.

The following reference dimensions were used:

$S$ = 2690.0 $ft^2$

$\ell_b$ = 1297.0 in.

Hinge moment data were reduced about their respective hinge lines using the following reference values:

$S_e$ = 210.0 $ft^2$

$\bar{C}_e$ = 90.7 in.

Base and forebody coefficients were calculated as follows:

$$C_{N_{b_o}} = -C_{P_{b_o}} \frac{A_{b_o}}{S} \tan i_{b_o} - C_{P_{b_{OMS}}} \frac{A_{b_{OMS}}}{S}$$

$$C_{N_{bf}} = -C_{P_{bf}} \frac{A_{bf}}{S}$$

$$C_{A_{b_o}} = -C_{P_{b_o}} \frac{A_{b_o}}{S} - C_{P_{b_{OMS}}} \frac{A_{b_{OMS}}}{S}$$

$$C_{A_{b_{ET}}} = -C_{P_{b_{ET}}} \frac{A_{b_{ET}}}{S}$$

DATA REDUCTION (Continued)

$$C_{A_{b_{SRB}}} = -C_{P_{b_{SRB}}} \frac{A_{b_{SRB}}}{S}$$

$$C_{m_{b_o}} = -\frac{X_{b_o}}{\ell_b} C_{N_{b_o}} + \frac{Z_{b_o}}{\ell_b} C_{A_{b_o}}$$

$$C_{m_{bf}} = -\frac{X_{bf}}{\ell_b} C_{N_{bf}}$$

$$C_{N_{f_o}} = C_{N_o} - C_{N_{b_o}} - C_{N_{bf}}$$

$$C_{m_{f_o}} = C_{m_o} - C_{m_{b_o}} - C_{m_{bf}}$$

$$C_{A_{f_o}} = C_{A_o} - C_{A_{b_o}}$$

$$C_{A_{f_{ET}}} = C_{A_{ET}} - C_{A_{b_{ET}}}$$

$$C_{A_{f_{SRB}}} = C_{A_{SRB}} - C_{A_{b_{SRB}}}$$

$$A_{b_{ET}} = 597.56 \text{ ft}^2$$

$$A_{bf} = 142.6 \text{ ft}^2$$

$$A_{b_o} = 314.10 \text{ ft}^2$$

$$A_{b_{OMS}} = 122.57 \text{ ft}^2$$

$A_{b_{SRB}} = 201.07\ ft^2$

$i_{b_o} = 14.75°$

$X_{bf} = 1329.7$ in.

$X_{b_o} = 1263.0$ in.

$Z_{b_o} = 336.5$ in.

Base pressure coefficients represented the average pressure on the respective bases. Body flap pressure coefficients were as given by figure 2o.

Right SRB forces and moments were calculated as a mirror image of left SRB forces and moments about $\beta = 0$:

$$\begin{pmatrix}\text{Coefficient on}\\ \text{Right SRB}\\ \text{at } +\beta\end{pmatrix} = \begin{pmatrix}\text{Coefficient on}\\ \text{Left SRB}\\ \text{at } -\beta\end{pmatrix}$$

Forces and moment on each component (Orbiter, ET, left SRB, and right SRB) were inte polated versus the respective angle of attack and angle of sideslip of each component to nominal angles. These data were then added to provide total integrated vehicle forces and moments.

TABLE I

TEST : IA81B

DATE : 8-23-74

TEST CONDITIONS

| MACH NUMBER | REYNOLDS NUMBER (per foot) | DYNAMIC PRESSURE (pounds/sq. inch) | STAGNATION TEMPERATURE (degrees Fahrenheit) |
|---|---|---|---|
| 1.55 | $2.50 \times 10^6$ | 3.189 | 120 |
| 2.00 | $2.50 \times 10^6$ | 3.189 | 120 |
| 2.20 | $2.50 \times 10^6$ | 3.750 | 120 |
| 2.50 | $2.50 \times 10^6$ | 3.472 | 120 |
| | | | |
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BALANCE UTILIZED: Task Corp 2.5" MK XXA, 2.0" MKIIIC, 1.5" MKIIC

| | CAPACITY: 2.5" | 2.0" | 1.5" | COEFFICIENT TOLERANCE: |
|---|---|---|---|---|
| NF | 6000 | 1800 | 1000 | |
| SF | 3000 | 900 | 500 | |
| AF | 600 | 500 | 100 | |
| PM | | | | |
| RM | 4000 | 1000 | 800 | |
| YM | | | | |

COMMENTS:

TABLE II

TEST: IA81B 97-019 — DATA SET RUN NUMBER COLLATION SUMMARY — DATE: 8-23-74

| DATA SET IDENTIFIER | CONFIGURATION | SCHD. α | SCHD. β | $\delta_{SB}$/$\delta_{RB}$ | $\delta_R$ | $\delta_{SB}$ | M | RN/FT | | B=0 | | ALPHA = -6 | -4 | -2 | 0 | +2 | +4 | +6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RET 030 | LVA' W/ALL HINGELINES SEALED | D | 0 | 0 | 0 | 55 | 2.5 | 3.0 | | 100 | | | | | | | | |
| 31 | | D | 0 | 0 | " | 55 | 2.2 | " | | 101 | | | | | | | | |
| 32 | | D | 0 | 0 | | 55 | 2.0 | | | 102 | | | | | | | | |
| 33 | | I | 0 | 0 | | 55 | 1.55 | ↓ | | 103 | | | | | | | | |
| 34 | | E | 0 | 8/4 | | 0 | 1.55 | 2.5 | | 115 | | | | | | | | |
| 35 | | A | A | 8/4 | | " | 1.55 | " | | | | 112 | 116 | 117 | 118 | 119 | 120 | 121 |
| 36 | | A | A | 8/4 | | | 2.0 | | | | | 122 | 123 | 124 | 125 | 126 | 127 | 128 |
| 37 | | A | A | 8/4 | | | 2.2 | | | | | 129 | 130 | 131 | 132 | 133 | 134 | 135 |
| 38 | | A | A | 8/4 | | | 2.5 | | | | | 136 | 137 | 138 | 139 | 140 | 141 | 142 |
| 39 | | G | G | 0/0 | | | 1.55 | | | | | 143 | 144 | | 145 | | 146 | 147 |
| 40 | | G | G | 0/0 | | | 2.0 | | | | | 148 | 149 | | 150 | | 151 | 152 |
| 41 | | G | G | 0/0 | | | 2.2 | | | | | 153 | 154 | | 155 | | 156 | 157 |
| 42 | | G | G | 0/0 | | | 2.5 | | | | | 158 | 159 | | 160 | | 161 | 162 |
| 43 | | H | H | 8/0 | | | 1.55 | | | | | 163 | 164 | 165 | 166 | 167 | 168 | 169 |
| 44 | | H | H | 8/0 | | | 2.0 | | | | | 170 | 171 | 172 | 173 | 174 | 175 | 176 |
| 45 | | H | H | 8/0 | | | 2.2 | | | | | 177 | 178 | 179 | 180 | 181 | 152 | 183 |
| 46 | | H | H | 10/4 | | | 1.55 | | | | | 184 | 185 | 186 | 187 | 188 | 189 | 190 |
| 47 | | H | H | 10/4 | ↓ | ↓ | 2.0 | ↓ | | | | 191 | 192 | 193 | 194 | 195 | 196 | 197 |

TEST RUN NUMBERS

SEE SUPPLEMENTARY SCHEDULE ON FOLLOWING PAGE

α OR β SCHEDULES: SEE PAGE 28

TABLE II (Continued)

| COMPONENT | DATASET IDENTIFIER | INDEPENDENT VARIABLES | | FORCE COEFFICIENT SCHEDULE | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Orbiter | RETOXX | BETAO | ALPHAO | CNF | CLMF | CA | CY | CYNF | CBL | *CABT | CAF |
| External Tank | RETTXX | BETAT | ALPHAT | CNF | CLMF | CA | CY | CYNF | CBL | CABT | CAF |
| Left SRB | RETLXX | BETAL | ALPHAL | CNF | CLMF | CA | CY | CYNF | CBL | CABT | CAF |
| Hinge Moment | RETHXX | BETAO | ALPHAO | CHEI | CHEO | CHM1 | CHM2 | CHM3 | CHM4 | | |

* Where CABT is $C_{A_b} + C_{A_c}$ for each vehicle component.

TABLE II (Concluded)

Nominal $\alpha$ or $\beta$ Schedules

Schedule A

| $\beta$ \ $\alpha$ | -6 | -4 | -2 | 0 | 2 | 4 | 6 |
|---|---|---|---|---|---|---|---|
| -6 | - | x | x | x | x | x | - |
| -4 | x | x | - | x | - | x | x |
| -2 | x | - | x | - | x | - | x |
| 0 | x | x | - | x | - | x | x |
| 2 | x | - | x | - | x | - | x |
| 4 | x | x | - | x | - | x | x |
| 6 | - | x | x | x | x | x | - |

Schedule H

| $\beta$ \ $\alpha$ | -6 | -4 | -2 | 0 | 2 | 4 | 6 |
|---|---|---|---|---|---|---|---|
| -6 | | | | x | | | |
| -4 | | x | | x | | x | |
| -2 | | | | x | | | |
| 0 | x | x | x | x | x | x | x |
| 2 | | | | x | | | |
| 4 | | x | | x | | x | |
| 6 | | | | x | | | |

Schedule G

| $\beta$ \ $\alpha$ | -6 | -4 | 0 | 4 | 6 |
|---|---|---|---|---|---|
| -6 | | | x | | |
| -4 | | x | x | x | |
| 0 | x | x | x | x | x |
| 4 | | x | x | x | |
| 6 | | | x | | |

Schedule D

$\beta = 0$, $\alpha = -6, -4, 0, 4, 8, 10$

Schedule E

$\beta = 0$, $\alpha = -6, -4, -2, 0, 2, 4, 6$

Schedule I

$\beta = 0$, $\alpha = -6, -4, 0, 4, 8$

TABLE III. - MODEL DIMENSIONAL DATA

MODEL COMPONENT: ATTACH STRUCTURE - $AT_{28}$

GENERAL DESCRIPTION: Rear orbiter to ET attach structure (LH and RH). 2 Members.

MODEL SCALE: 0.030 MODEL DRAWING NO.: _____

DRAWING NO.: V178-000063, -000628

| DIMENSIONS: | MEMBER | | FULL SCALE | MODEL SCALE |
|---|---|---|---|---|
| | #1 | $X_o$ | 1317.00 | 39.51 |
| | | $Y_o$ | - 96.50 (LH) | - 2.895 |
| | | | 96.50 (RH) | 2.895 |
| | | $Z_o$ | 267.50 | 8.025 |
| | | $X_T$ | 2058.00 | 61.740 |
| | | $Y_T$ | - 125.68 (LH) | - 3.770 |
| | | | 125.68 (RH) | 3.770 |
| | | $Z_T$ | 515.5 | 15.465 |
| | #2 | $X_o$ | 1317.00 | 39.51 |
| | | $Y_o$ | - 96.50 (LH) | - 2.895 |
| | | | 96.50 (RH) | 2.895 |
| | | $Z_o$ | 267.50 | 8.025 |
| | | $X_T$ | 1872.00 | 56.160 |
| | | $Y_T$ | -125.68 (LH) | - 3.770 |
| | | | 125.68 (RH) | 3.770 |
| | | $Z_T$ | 504.5 | 15.135 |
| Diameter, In. | #1 | | 11.5 | 0.345 |
| | #2 | | 15.5 | 0.465 |

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ATTACH STRUCTURE - $AT_{29}$

GENERAL DESCRIPTION: Right-hand umbilical fairing to ET cross member attach structure (1 member).

MODEL SCALE: 0.030 MODEL DRAWING NO.: _____

DRAWING NO.: VL78-000062B, -Martin Marietta 82600207000

| DIMENSIONS: | | FULL SCALE | MODEL SCALE |
|---|---|---|---|
| Umbilical fairing attach point: | $X_o$ | 1317.00 | 39.510 |
| | $Y_o$ | 66.316 | 1.989 |
| | $Z_o$ | 247.182 | 7.415 |
| | $X_T$ | 2058.683 | 61.740 |
| | $Y_T$ | 66.316 | 1.989 |
| | $Z_T$ | 583.683 | 17.510 |
| ET attach point: | $X_T$ | 2058.00 | 61.740 |
| | $Y_T$ | - 12.00 | - 0.360 |
| | $Z_T$ | 568.25 | 17.048 |
| | $X_o$ | 1317.00 | 39.510 |
| | $Y_o$ | - 12.00 | - 0.36 |
| | $Z_o$ | 60.75 | 1.823 |
| Attach structure dia., in. | | 4.5 | 0.135 |

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ATTACH STRUCTURE - $AT_{30}$

GENERAL DESCRIPTION: Forward SRB to ET attach structure (LH and RH).

MODEL SCALE: 0.030

DRAWING NO.: VL78-000066, Martin Marietta 82600204300

| DIMENSIONS: | | FULL SCALE | MODEL SCALE |
|---|---|---|---|
| Attach point | $X_T$ | 985.675 | 29.570 |
| | $Y_T$ | -172.50 (LH) | - 5.175 |
| | | 172.50 (RH) | 5.175 |
| | $Z_T$ | 0.0 | 0.0 |
| | $X_S$ | 442.675 | 13.280 |
| | $Y_S$ | 80.00 | 2.400 |
| | $Z_S$ | 0.0 | 0.0 |
| | $X_O$ | 244.675 | 7.340 |
| | $Y_O$ | - 184.5 (LH) | —5.535 |
| | | 184.5 (RH) | 5.535 |
| | $Z_O$ | 0.0 | 0.0 |

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ATTACH STRUCTURE - $AT_{31}$

GENERAL DESCRIPTION: Rear ET to SRB attach structure (LH & RH), 3 members.

MODEL SCALE: 0.030 MODEL DRAWING: _____

DRAWING NO.: VL78-000063, -000062B, -000066

DIMENSIONS:

| MEMBER | | FULL SCALE | MODEL SCALE |
|---|---|---|---|
| #1 | $X_T$ | 2058.00 | 61.74 |
| | $Y_T$ | - 171.50 (LH) | - 5.145 |
| | | 171.50 (RH) | 5.145 |
| | $Z_T$ | 457.00 | 13.710 |
| | $X_s$ | 1511.00 | 45.33 |
| | $Y_s$ | 53.24 | 1.597 |
| | $Z_s$ | 57.00 | 1.710 |
| #2 | $X_T$ | 2058.00 | 61.74 |
| | $Y_T$ | - 163.58 | - 4.916 |
| | $Z_T$ | 449.81 | 13.494 |
| | $X_s$ | 1511.00 | 45.33 |
| | $Y_s$ | 76.56 | 2.297 |
| | $Z_s$ | 15.73 | 0.472 |
| #3 | $X_T$ | 2058.00 | 61.74 |
| | $Y_T$ | - 161.72 | - 4.852 |
| | $Z_T$ | 343.00 | 10.29 |
| | $X_s$ | 1511.00 | 45.33 |
| | $Y_s$ | 53.24 | 1.597 |
| | $Z_s$ | - 57.00 | - 1.710 |
| Diameter of members, In.: | #1 | | |
| | #2 | | |
| | #3 | | |

TABLE III.- MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ATTACH STRUCTURE - AT32

GENERAL DESCRIPTION: Forward orbiter/ET attach structure (2 member structure)

MODEL SCALE: 0.030

DRAWING NO.: VL78-000062B, Martin Marietta P260020914

| DIMENSIONS: | MEMBER | | FULL SCALE | MODEL SCALE |
|---|---|---|---|---|
| | #1 | $X_o$ | 388.15 | 11.6445 |
| | | $Y_o$ | 0.0 | 0.0 |
| | (Attach pt on orb $Z_T$= 614) | $Z_o$ | LWR ML | LWR ML |
| | | $X_T$ | 1129.9 | 34.05 |
| | | $Y_T$ | 46.50 | 1.395 |
| | (Attach pt on tank) | $Z_T$ | 562.58 | 16.877 |
| | #2 | $X_o$ | 388.15 | 11.645 |
| | | $Y_o$ | 0.0 | 0.0 |
| | | $Z_o$ | LWR ML | LWR ML |
| | | $X_T$ | 1129.9 | 34.05 - |
| | | $Y_T$ | - 46.50 | - 1.395 |
| | | $Z_T$ | 562.58 | 16.877 |
| Diameter, In. | #1 | | 6.0 | 0.180 |
| | #2 | | 6.0 | 0.180 |

TABLE III.- MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT : BODY - $B_{26}$

GENERAL DESCRIPTION : Configuration 140A/B orbiter fuselage

NOTE: $B_{26}$ is identical to $B_{24}$ except underside of fuselage has been refaired to accept $W_{116}$.

MODEL SCALE: 0.030 MODEL DRAWING NO.: SS-A00147, Rel. 12.

DRAWING NUMBER : VL70-000143B, -000200, -000205, -006089, -000145, -000140A, -000140B

| DIMENSIONS | FULL SCALE | MODEL SCALE |
|---|---|---|
| Length (OML: Fwd Sta. $X_o$=235), In. | 1293.3 | 38.799 |
| Length (IML: Fwd Sta. $X_o$=238), In. | 1290.3 | 38.709 |
| Max Width (@ $X_o$ = 1528.3), In. | 264.0 | 7.920 |
| Max Depth (@ $X_o$ = 1464), In. | 250.00 | 7.500 |
| Fineness Ratio | 0.264 | 0.264 |
| Area - $Ft^2$ | | |
| Max. Cross-Sectional | 340.88 | 0.307 |
| Planform | | |
| Wetted | | |
| Base | | |

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT : CANOPY - $C_9$

GENERAL DESCRIPTION : Configuration 3A. Canopy used with fuselage $B_{2n}$

MODEL SCALE: 0.030 MODEL DWG NO.: SS-A00147

DRAWING NUMBER : VL70-000143A

| DIMENSIONS : | FULL SCALE | MODEL SCALE |
|---|---|---|
| Length ($X_o$ =434.643 to 578), In. | 143.357 | 4.301 |
| Max Width ($X_o$ = 513.127), In. | 152.412 | 4.572 |
| Max Depth (At $X_o$ = 485.), In. | 25.000 | 0.750 |
| Fineness Ratio | | |
| Area | | |
| Max. Cross-Sectional | | |
| Planform | | |
| Wetted | | |
| Base | | |

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ELEVON - $E_{44}$

GENERAL DESCRIPTION: 6.0 In. F.S. gaps machined into $E_{44}$ elevon. Flapper doors, counterbody pieces, and tipseals are not simulated. (Data are for one of two sides).

MRC area = 0.030

DRAWING NUMBER: Not available

| DIMENSIONS: | FULL-SCALE | MODEL SCALE |
|---|---|---|
| Area -- $Ft^2$ | 210.0 | 0.189 |
| Span (equivalent), In. | 349.2 | 10.476 |
| Inb'd equivalent chord , In. | 118.0 | 3.54 |
| Outb'd equivalent chord, In. | 55.19 | 1.656 |
| Ratio movable surface chord/ total surface chord | | |
| At Inb'd equiv. chord | 0.2096 | 0.2096 |
| At Outb'd equiv. chord | 0.2096 | 0.2096 |
| Sweep Back Angles, degrees | | |
| Leading Edge | 0.00 | 0.00 |
| Trailing Edge | - 10.056 | - 10.056 |
| Hingeline | 0.00 | 0.00 |
| Area Moment (Product of area & $\bar{y}$), $Ft^3$ | 1587.25 | 0.0429 |
| Mean Aerodynamic Chord, In. | 90.7 | 2.721 |

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT : BODY FLAP - $F_0$

GENERAL DESCRIPTION : Configuration 140 A/B

MODEL SCALE: 0.030

DRAWING NUMBER : VL70-000140B, -000200

| DIMENSIONS : | FULL SCALE | MODEL SCALE |
|---|---|---|
| Length (Chord), In. | 84.7 | 2.541 |
| Max Width , In. | 262.308 | 7.869 |
| Max Depth , In. | 23.00 | 0.690 |
| Fineness Ratio | | |
| Area - $Ft^2$ | | |
| Max. Cross-Sectional | | |
| Planform | 142.60 | 0.128 |
| Wetted | | |
| Base | 41.90 | 0.0377 |

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TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: FEEDLINE - $FI_{10}$

GENERAL DESCRIPTION: $LH_2$ feedline on upper left-hand side of $T_{28}$.

MODEL SCALE: 0.030

DRAWING NO.: VL78-000063, -000062B

| DIMENSIONS: | | FULL SCALE | MODEL SCALE |
|---|---|---|---|
| Leading edge at: | $X_T$ | 2071.5 | 62.145 |
| | $Y_T$ | - 70.0 | - 2.100 |
| | $Z_T$ | 573.934 | 17.218 |
| Trailing edge at: | $X_T$ | 2081.80 | 62.454 |
| | $Y_T$ | - 70.00 | - 2.10 |
| | $Z_T$ | 584.059 | 17.522 |
| Diameter of line (17.0 I.D.) | | 18.160 | 0.545 |

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: FEEDLINE - $FL_{11}$

GENERAL DESCRIPTION: $LO_2$ feedline on upper right-hand of $T_{28}$.

MODEL SCALE: 0.030

DRAWING NO.: VL78-000063, VL78-000062B

DIMENSIONS:

| | | | FULL SCALE | MODEL SCALE |
|---|---|---|---|---|
| Leading edge at: | $X_T$ | | 1000.667 | 30.02 |
| | $Y_T$ | | 70.00 | 2.10 |
| | $Z_T$ | | 150.519 | 4.516 |
| Trailing edge at: | $X_T$ | | 2071.5 | 62.145 |
| | $Y_T$ | | 70.00 | 2.100 |
| | $Z_T$ | | 573.934 | 17.218 |
| Line diameter (17.0 I.D.) | | (O.D.) | 18.16 | 0.545 |

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: FAIRING - $FR_{10}$

GENERAL DESCRIPTION: Umbilical door fairing between aft ET/orbiter attach structure.

MODEL SCALE: 0.030

DRAWING NO.: VL78-000063, -000062B, Martin Marietta 82600207000

| DIMENSIONS: | FULL SCALE | MODEL SCALE |
|---|---|---|
| Leading edge at | 2052.0 | 61.74 |
| Length | 193.0 | 5.79 |
| Width | 15.0 | 0.45 |

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: OMS POD - $M_{16}$

GENERAL DESCRIPTION: Configuration 140C orbiter OMS pod - short pod.

MODEL SCALE: 0.030.

DRAWING NUMBER VL70-008401, -008410

| DIMENSION: | FULL SCALE | MODEL SCALE |
|---|---|---|
| Length (OMS Fwd Sta. $X_o$=1310.5), In. | 258.50 | 7.755 |
| Max Width (@ $X_o$ = 1511), In. | 136.8 | 4.104 |
| Max Depth (@ $X_o$ = 1511), In. | 74.70 | 2.241 |
| Fineness Ratio | 2.484 | 2.484 |
| Area - $Ft^2$ | | |
| Max Cross-Sectional | 58.864 | 0.053 |
| Planform | | |
| Wetted | | |
| Base | | |

TABLE III. - MODEL DIMENSIONAL DATA- Continued.

MODEL COMPONENT: OMS NOZZLES - $N_{28}$

GENERAL DESCRIPTION: Configuration 140A/B orbiter OMS Nozzles

MODEL SCALE: 0.030

DRAWING NUMBER: VL70-000140A (Location), SS-A00106, Rel. 5 (Contour)

| DIMENSIONS: | FULL SCALE | MODEL SCALE |
|---|---|---|
| MACH NO. | | |
| Length - In. | | |
| Gimbal Point to Exit Plane | | |
| Throat to Exit Plane | | |
| Diameter - In. | | |
| Exit | | |
| Throat | | |
| Inlet | | |
| Area - $ft^2$ | | |
| Exit | | |
| Throat | | |
| Gimbal Point (Station) In. | | |
| Left ~~Upper~~ Nozzle | | |
| $X_o$ | 1518.00 | 45.54 |
| $Y_o$ | - 88.0 | -2.64 |
| $Z_o$ | 492.00 | 14.76 |
| Right ~~Lower~~ Nozzle | | |
| $X_o$ | 1518.00 | 45.54 |
| $Y_o$ | 88.0 | 2.64 |
| $Z_o$ | 492.00 | 14.76 |
| Null Position - Deg. | | |
| Left ~~Upper~~ Nozzle | | |
| Pitch | 15°49' | 15°49' |
| Yaw | 12°17' | 12°17' |
| Right ~~Lower~~ Nozzle | | |
| Pitch | 15°49' | 15°49' |
| Yaw | 12°17' | 12°17' |

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: BSRM NOZZLE - $N_{86}$

GENERAL DESCRIPTION: Booster solid rocket motor nozzles.

MODEL SCALE: 0.030

DRAWING NO.: VL70-000066

| DIMENSIONS: | FULL SCALE | MODEL SCALE |
|---|---|---|
| Diameter, $D_{ex}$ - In. (I.D.) | 144.29 | 4.3287 |
| Diameter, $D_{ex}$ - In. (O.D.) | 146.79 | 4.4037 |
| Diameter, DT - IN. | | |
| Diameter, $D_{in}$ - In. | | |
| Area - $Ft^2$ | | |
| Max. Cross-sectional (I.D.) | 113.553 | 0.102 |
| Gimbal Origin: | | |
| Left Nozzle | | |
| $X_o$ | 1902.6 | 57.078 |
| $Y_o$ | -250.50 | - 7.515 |
| $Z_o$ | 400.0 | 12.00 |
| Right Nozzle | | |
| $X_o$ | 1902.6 | 57.078 |
| $Y_o$ | 250.50 | 7.515 |
| $Z_o$ | 400.0 | 12.00 |
| Null Position: (Deg.) | | |
| Left nozzle gimbal | ± 8 | ± 8 |
| Right nozzle gimbal | ± 8 | ± 8 |

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ET PROTUBERANCE - $PT_{12}$

GENERAL DESCRIPTION: Lightning rod attached to ET nose.

MODEL SCALE: 0.030

| DIMENSIONS: | FULL SCALE | MODEL SCALE |
|---|---|---|
| Length | 30.90 | 0.927 |
| Diameter - In. | 3.20 | 0.096 |

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ELECTRICAL LINE - $PT_{22}$

GENERAL DESCRIPTION: Left-hand electrical conduit line on $T_{28}$.

MODEL SCALE: 0.030.

DRAWING NUMBER VL78-000063, -000062B

| DIMENSION: | | FULL SCALE | MODEL SCALE |
|---|---|---|---|
| Leading edge at: | $X_T$ | 1084.333 | 32.530 |
| | $Y_T$ | - 99.591 | - 2.988 |
| | $Z_T$ | -139.620 | - 4.189 |
| Trailing edge at: | $X_T$ | 2058.000 | 61.740 |
| | $Y_T$ | - 99.591 | - 2.988 |
| | $Z_T$ | - 139.620 | - 4.189 |
| Conduit size: | | 2.0 x 6.0 | 0.06 x 0.18 |

Centerline of line located radially at $\emptyset$ = 35.5 deg.

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: $LO_2$ RECIRCULATION LINE - $PT_{23}$

GENERAL DESCRIPTION: $LO_2$ recirculation line on right-hand upper side side of $T_{28}$.

MODEL SCALE: 0.030

DRAWING NO.: VL78-000063, -000062B, Martin Marietta 82600207000

| DIMENSIONS: | | FULL SCALE | MODEL SCALE |
|---|---|---|---|
| Leading edge at: | $X_T$ | 1040.667 | 31.220 |
| | $Y_T$ | 94.169 | 2.825 |
| | $Z_T$ | 540.934 | 16.228 |
| Trailing edge at: | $X_T$ | 2062.920 | 61.888 |
| | $Y_T$ | 70.000 | 2.100 |
| | $Z_T$ | 573.934 | 17.218 |
| Diameter of line | | 4.0 | 0.120 |

Centerline of line located radially at $\emptyset = 33^{\circ}45'$
(Right of TDC looking forward)

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: $LH_2$ RECIRCULATION LINE - $PT_{24}$

GENERAL DESCRIPTION: $LH_2$ recirculation line on $T_{28}$.

MODEL SCALE: 0.030

DRAWING NO.: VL78-000063, -000628, Martin Marietta 82600207000

| DIMENSIONS: | | FULL SCALE | MODEL SCALE |
|---|---|---|---|
| Leading edge at: | $X_T$ | 1040.667 | 31.220 |
| | $Y_T$ | - 94.169 | - 2.825 |
| | $Z_T$ | 540.934 | 16.228 |
| Trailing edge at: | $X_T$ | 2062.920 | 61.888 |
| | $Y_T$ | - 70.00 | -2.100 |
| | $Z_T$ | 573.934 | 17.218 |
| Diameter of line | | 4.00 | 0.120 |

Centerline of line located radially at $\emptyset = 33°45'$
(Left of TDC looking forward)

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ELECTRICAL LINE - $PT_{25}$

GENERAL DESCRIPTION: Right-hand aft electrical conduit line on $T_{28}$ with $LH_2$ pressure sensor line and LOX vent valve actuator line.

MODEL SCALE: 0.030

DRAWING NO.: VL78-000063, -000062B, Martin Marietta 82600207000

DIMENSIONS:

| | | FULL SCALE | MODEL SCALE |
|---|---|---|---|
| Leading edge at: | $X_T$ | 1084.333 | 32.530 |
| | $Y_T$ | 99.591 | 2.988 |
| | $Z_T$ | 139.620 | 4.189 |
| Trailing edge at: | $X_T$ | 2058.000 | 61.74 |
| | $Y_T$ | 99.591 | 2.988 |
| | $Z_T$ | 139.620 | 4.189 |
| Line diameter | | 2.0 x 6.0 | 0.06 x 0.18 |

Centerline of line located radially at $\emptyset = 35.5^{\circ}$

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: $LO_2$ PRESSURE LINE - $PT_{26}$

GENERAL DESCRIPTION: $LO_2$ pressure line on $T_{28}$.

MODEL SCALE: 0.030

DRAWING NO.: VL78-000063, -0000628, Martin Marietta 82600207000

| DIMENSIONS: | | FULL SCALE | MODEL SCALE |
|---|---|---|---|
| Leading edge at: | $X_T$ | 360.733 | 10.822 |
| | $Y_T$ | 15.145 | 0.454 |
| | $Z_T$ | 407.718 | 12.232 |
| Trailing edge at: | $X_T$ | 2083.5 | 62.505 |
| | $Y_T$ | 63.25 | 1.898 |
| | $Z_T$ | 609.00 | 18.27 |
| Centerline of line located radially at $\emptyset = 27^\circ$ | | | |
| Line diameter | | 2.0 | 0.060 |

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ELECTRICAL LINE - $PT_{27}$

GENERAL DESCRIPTION: Electrical conduit on the right-hand forward section of $T_{28}$.

MODEL SCALE: 0.030

DRAWING NO.: VL78-000628

| DIMENSIONS: | | FULL SCALE | MODEL SCALE |
|---|---|---|---|
| Leading edge at: | $X_T$ | 360.733 | 10.822 |
| | $Y_T$ | 11.549 | 0.346 |
| | $Z_T$ | 412.474 | 12.374 |
| Trailing edge at: | $X_T$ | 876.273 | 26.288 |
| | $Y_T$ | 226.114 | 6.783 |
| | $Z_T$ | 646.774 | 19.403 |

Centerline of conduit located radially at $\emptyset = 47.5^{\circ}$

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: RUDDER - $B_5$

GENERAL DESCRIPTION: Configuration 140C orbiter rudder (Identical to configuration 140A/B rudder).

MODEL SCALE: 0.030

DRAWING NUMBER: VL70-000146B, --000095

| DIMENSIONS: | FULL-SCALE | MODEL SCALE |
|---|---|---|
| Area - $Ft^2$ | 100.15 | 0.090 |
| Span (equivalent), In. | 201.0 | 6.03 |
| Inb'd equivalent chord, In. | 91.585 | 2.748 |
| Outb'd equivalent chord, In. | 50.833 | 1.525 |
| Ratio movable surface chord/ total surface chord | | |
| At Inb'd equiv. chord | 0.400 | 0.400 |
| At Outb'd equiv. chord | 0.400 | 0.400 |
| Sweep Back Angles, degrees | | |
| Leading Edge | 34.83 | 34.83 |
| Trailing Edge | 26.25 | 26.25 |
| Hingeline | 34.83 | 34.83 |
| Area Moment (Product of area & $\bar{c}$), $Ft^3$ | 610.92 | 0.016 |
| Mean Aerodynamic Chord, In. | 73.2 | 2.196 |

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: BOOSTER SOLID ROCKET MOTOR - $S_{21}$

GENERAL DESCRIPTION:

MODEL SCALE: 0.030 .

DRAWING NUMBER VL72-000143D, VL77-000066

| DIMENSION: | FULL SCALE | MODEL SCALE |
|---|---|---|
| Length (Includes nozzle), In. | 1789.40 | 53.682 |
| ~~Max Width~~ Tank Diameter, In. | 146.00 | 4.38 |
| ~~Max Depth~~ Aft shroud Dia., In. | 192.00 | 5.76 |
| Fineness Ratio | 9.3198 | 9.3198 |
| Area - $Ft.^2$ | | |
| Max Cross-Sectional | 201.062 | 0.1809 |
| Planform | | |
| Wetted | | |
| Base | | |
| WP of BSRM centerline ($Z_T$) | 400.0 | 1.200 |
| FS of BSRM nose ($X_T$) | 743.0 | 22.29 |
| BP of BSRM centerline ($Y_T$) | 250.5 | 7.515 |

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: EXTERNAL TANK - $T_{20}$

GENERAL DESCRIPTION:

NOTE: (Dimensions are to tank structural OML, TPS not included.)

MODEL SCALE: 0.030

DRAWING NUMBER VL72-000143D, VL78-000063

| DIMENSION: | FULL SCALE | MODEL SCALE |
|---|---|---|
| Length, In. | 1844.275 | 55.328 |
| Max ~~Width~~ Dia., In. | 331.00 | 9.93 |
| Max Depth | | |
| Fineness Ratio | 5.687 | 5.687 |
| Area - $Ft^2$ | | |
| Max Cross-Sectional | 594.678 | 0.053 |
| Planform | | |
| Wetted | | |
| Base | | |

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: VERTICAL - $V_B$

GENERAL DESCRIPTION: Configuration 140C orbiter vertical tail ( identical to configuration 140A/B vertical tail)

MODEL SCALE: 0.030

DRAWING NUMBER: VL70-000140C, -000146B

| DIMENSIONS: | FULL SCALE | MODEL SCALE |
|---|---|---|
| TOTAL DATA | | |
| Area (Theo) - $Ft^2$ | | |
| Planform | 413.253 | 0.372 |
| Span (Theo) - In. | 315.72 | 9.472 |
| Aspect Ratio | 1.675 | 1.675 |
| Rate of Taper | 0.507 | 0.507 |
| Taper Ratio | 0.404 | 0.404 |
| Sweep-Back Angles, Degrees. | | |
| Leading Edge | 45.000 | 45.000 |
| Trailing Edge | 26.25 | 26.25 |
| 0.25 Element Line | 41.13 | 41.13 |
| Chords: | | |
| Root (Theo) WP | 268.50 | 8.055 |
| Tip (Theo) WP | 108.47 | 3.254 |
| MAC | 199.81 | 5.992 |
| Fus. Sta. of .25 MAC | 1463.35 | 43.901 |
| W.P. of .25 MAC | 635.52 | 19.066 |
| B.L. of .25 MAC | 0.00 | 0.00 |
| Airfoil Section | | |
| Leading Wedge Angle - Deg. | 10.00 | 10.00 |
| Trailing Wedge Angle - Deg. | 14.92 | 14.92 |
| Leading Edge Radius | 2.00 | 0.060 |
| Void Area | 13.17 | 0.0019 |
| Blanketed Area | 0.0 | 0.0 |

TABLE III. - MODEL DIMENSIONAL DATA - Concluded.

MODEL COMPONENT: $W_{116}$

GENERAL DESCRIPTION: Configuration 4

NOTE: Identical to $W_{114}$ except airfoil thickness. Dihedral angle is along trailing edge of wing.

MODEL SCALE : 0.030

TEST NO. DWG. NO. VL70-000140A, -000200

| DIMENSIONS: | FULL-SCALE | MODEL SCALE |
|---|---|---|
| TOTAL DATA | | |
| Area (Theo.) $Ft^2$ | | |
| Planform | 2690.00 | 2.421 |
| Span (Theo In. | 936.68 | 28.10 |
| Aspect Ratio | 2.265 | 2.265 |
| Rate of Taper | 1.177 | 1.177 |
| Taper Ratio | 0.200 | 0.200 |
| Dihedral Angle, degrees | 3.500 | 3.500 |
| Incidence Angle, degrees | 0.500 | 0.500 |
| Aerodynamic Twist, degrees | 3.000 | 3.000 |
| Sweep Back Angles, degrees | | |
| Leading Edge | 45.000 | 45.000 |
| Trailing Edge | - 10.056 | - 10.056 |
| 0.25 Element Line | 35.209 | 35.209 |
| Chords: | | |
| Root (Theo) B.P.0.0. | 689.24 | 20.677 |
| Tip, (Theo) B.P. | 137.85 | 4.136 |
| MAC | 474.81 | 14.244 |
| Fus. Sta. of .25 MAC | 1136.83 | 34.105 |
| W.P. of .25 MAC | 290.58 | 8.717 |
| B.L. of .25 MAC | 182.13 | 5.464 |
| EXPOSED DATA | | |
| Area (Theo) $Ft^2$ | 1751.50 | 1.576 |
| Span, (Theo) In. BP108 | 720.68 | 21.620 |
| Aspect Ratio | 2.059 | 2.059 |
| Taper Ratio | 0.245 | 0.245 |
| Chords | | |
| Root BP108 | 562.09 | 16.863 |
| Tip 1.00 $\frac{b}{2}$ | 137.85 | 4.136 |
| MAC | 392.83 | 11.785 |
| Fus. Sta. of .25 MAC | 1185.98 | 35.579 |
| W.P. of .25 MAC | 294.30 | 8.829 |
| B.L. of .25 MAC | 251.77 | 7.553 |
| Airfoil Section (Rockwell Mod NASA) XXXX-64 | | |
| Root $\frac{b}{2}$ = | 0.113 | 0.113 |
| Tip $\frac{b}{2}$ = | 0.120 | 0.120 |
| Data for (1) of (2) Sides | | |
| Leading Edge Cuff Planform Area $Ft^2$ | 113.13 | 0.102 |
| Leading Edge Intersects Fus M. L. @ Sta | 500.0 | 15.00 |
| Leading Edge Intersects Wing @ Sta | 1024.00 | 30.72 |

# TABLE IV.
## ORBITER WING PRESSURE TAP NUMBERS

### ORBITER LEFT WING PRESSURE TAP NUMBERS

| η | $Y_0$ | | | NO. TAPS | Σ TAPS |
|---|---|---|---|---|---|
| | | X/c | 0 .041 .113 .247 .427 .547 .636 .727 .793 | | |
| .23 | 110 | TOP | 208 209 210 211 212 213 214 215 216 | 9 | 9 |
| | | BOT | - - - - - - - - - | 0 | |
| | | X/c | 0 .010 .020 .050 .094 .229 .362 .497 .720 .834 .865 .900 .965 | | |
| .29 | 140 | TOP | 217 218 219 220 221 222 223 224 225 226 227 228 229 | 13 | 34 |
| | | BOT | - 230 231 232 233 234 235 236 237 238 239 240 241 | 12 | |
| | | X/c | 0 .010 .020 .040 .086 .163 .246 .340 .671 .745 .839 .871 .919 .955 | | |
| .34 | 170 | TOP | 242 243 244 245 246 247 248 249 250 251 252 253 254 255 | 14 | 61 |
| | | BOT | - 256 257 258 259 260 261 262 263 264 265 266 267 268 | 13 | |
| | | X/c | 0 .010 .020 .040 .093 .177 .274 .402 .565 .760 .808 .859 .905 .953 | | |
| .47 | 200 | TOP | 269 270 271 272 273 274 275 276 277 278 279 280 281 282 - | 14 | 89 |
| | | BOT | - 283 284 285 286 287 288 289 290 291 292 293 294 295 296 | 14 | |
| | | X/c | 0 .010 .020 .050 .080 .150 .250 .400 .550 .725 .775 .850 .900 .950 | | |
| .54 | 250 | TOP | 297 298 299 300 301 302 303 304 305 306 307 308 309 310 | 14 | 116 |
| | | BOT | - 311 312 313 314 315 316 317 318 319 320 321 322 323 | 13 | |
| | | X/c | .775 .850 .900 1.000 | | |
| .64 | 300 | TOP | 333 334 335 - | 3 | 123 |
| | | BOT | 344 345 346 347 | 4 | |
| | | X/c | 0 .010 .020 .050 .150 .250 .400 .550 .700 | | |
| .73 | 315 | TOP | 324 325 326 327 328 329 330 331 332 | 9 | 140 |
| | | BOT | - 336 337 338 339 340 341 342 343 | 8 | |
| | | X/c | 0 .010 .020 .050 .150 .250 .650 .750 .850 .950 | | |
| .80 | 365 | TOP | 348 349 350 351 352 353 354 355 356 357 | 10 | 159 |
| | | BOT | - 358 359 360 361 362 363 364 365 366 | 9 | |
| | | X/c | 0 .010 .020 .050 .150 .250 .400 .600 .750 .900 1.000 | | |
| .85 | 415 | TOP | 367 368 369 370 371 372 373 374 375 376 - | 10 | 179 |
| | | BOT | - 377 378 379 380 381 382 383 384 385 386 | 10 | |
| | | X/c | 0 .028 .069 .157 .345 .503 .670 .862 | | |
| .92 | 435 | TOP | 387 388 389 390 391 392 393 394 | 8 | 194 |
| | | BOT | - 395 396 397 398 399 400 401 | 7 | |
| | | X/c | 1.362 1.405 | | |
| 1.0 | | TOP | 402 403 | 2 | 196 |
| | | BOT | - - | | |

### ORBITER RIGHT WING PRESSURE TAP NUMBERS

| η | $Y_0$ | | | NO. TAPS | Σ TAPS |
|---|---|---|---|---|---|
| | | X/c | 0 .041 .113 .247 .427 .547 .636 .727 .793 | | |
| .235 | 110 | TOP | 404 405 406 407 408 409 410 411 412 | 9 | 205 |
| | | BOT | - - - - - - - - - | 0 | |
| | | X/c | 0 .010 .020 .040 .086 .163 .246 .340 .637 .718 | | |
| .341 | 170 | TOP | 413 414 415 416 - 417 418 419 420 421 | 9 | 222 |
| | | BOT | - 422 423 424 425 426 427 428 - 429 | 8 | |

TABLE V. ORBITER FUSELAGE PRESSURE TAP NUMBERS

| ORBITER $X_o$ - IN. | | | $\phi$ RADIAL LOCATION ~ DEGREES | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FULL | MODEL | $X_o/L_o$ | 0 | 20 | 40 | 55 | 70 | 90 | 105 | 110 | 120 | 135 | 140 | 150 | 151 | 156 | 162 | 165 | 169 | 174 | 180 | 305 | 320 | 340 | NO TAPS | $\Sigma_{A-S}$ |
| 235 | 7.05 | 0 | 7 | | | | | | | | | | | | | | | | | | | | | | | |
| 245 | 7.35 | .008 | 8 | | | | | 9 | | | | | | | | | | | | | | | | | 1 | 1 |
| 265 | 7.95 | .023 | 11 | 12 | 13 | 14 | 15 | 16 | | | 17 | | | 18 | | | | | | | 10 | | | | 3 | 4 |
| 295 | 8.85 | .046 | 23 | 24 | 25 | 26 | 27 | 28 | | | 29 | | | 30 | | | | | | | 19 | 20 | 21 | 22 | 12 | 16 |
| 325 | 9.75 | .070 | 35 | 36 | 37 | 38 | 39 | 40 | | | 41 | | | 42 | | | | | | | 31 | 32 | 33 | 34 | 12 | 28 |
| 380 | 11.40 | .112 | 47 | 48 | 49 | 50 | 51 | 52 | | | 53 | | | 54 | | | | | | | 43 | 44 | 45 | 46 | 12 | 40 |
| 440 | 13.20 | .158 | | | | | | | | | | | | | | | | | | | 55 | 56 | 57 | 58 | 12 | 52 |
| 450 | 13.50 | .166 | 60 | 61 | 62 | 63 | 64 | 65 | | | 66 | | | | | | | | | 59 | | | | | 1 | 53 |
| 465 | 13.95 | .177 | | | | | | | | | | | | | | 67 | | | 68 | | 69 | 70 | 71 | 72 | 13 | 66 |
| 500 | 15.00 | .204 | 75 | 76 | 77 | 78 | 79 | 80 | | | 81 | | 82 | 83 | 73 | | 74 | | | | | | | | 2 | 68 |
| 560 | 16.80 | .251 | 89 | | 90 | | 91 | 92 | | | 93 | | | 94 | | | | 84 | | | 85 | 86 | 87 | 88 | 14 | 82 |
| 625 | 18.75 | .301 | 98 | | 99 | | 100 | 101 | | | 102 | | | 103 | | | | 95 | | | 96 | | 97 | | 9 | 91 |
| 725 | 21.75 | .378 | 107 | | 108 | | 109 | 110 | | | 111 | | | 112 | | | | 104 | | | 105 | | 106 | | 9 | 100 |
| 880 | 26.40 | .497 | 116 | | 117 | | 118 | 119 | | | 120 | | | 121 | | | | 113 | | | 114 | | 115 | | 9 | 109 |
| 980 | 29.40 | .574 | 125 | | 126 | | | | | | | | | | | | | 122 | | | 123 | | 124 | | 9 | 118 |
| 1080 | 32.40 | .652 | 128 | | 129 | | 130 | 131 | | | 132 | | | 133 | | | | 134 | | | | | 127 | | 3 | 121 |
| 1180 | 35.40 | .729 | 137 | | 138 | | 139 | 140 | | | 141 | | | 142 | | | | | | | 135 | | 136 | | 9 | 130 |
| 1245 | 37.35 | .779 | 145 | | 146 | | 147 | 148 | 149 | | 150 | 151 | | 152 | | | | | | | 143 | | 144 | | 8 | 138 |
| 1300 | 39.00 | .821 | 156 | | 157 | | 158 | 159 | 160 | | 161 | 162 | | 163 | | | | 153 | | | 154 | | 155 | | 11 | 149 |
| 1375 | 41.25 | .879 | 166 | | 167 | | 168 | 169 | 170 | | 171 | 172 | | 173 | | | | | | | 164 | | 165 | | 10 | 159 |
| 1430 | 42.90 | .921 | 176 | | 177 | | 178 | 179 | 180 | | 181 | 182 | | 183 | | | | 174 | | | | | 175 | | 10 | 169 |
| 1480 | 44.40 | .960 | 186 | | 187 | | 188 | 189 | 190 | | 191 | 192 | | 193 | | | | 184 | | | | | 185 | | 10 | 179 |
| 1530 | 45.90 | .999 | | | | | | | | 196 | 197 | | | | | | | 194 | | | | | 195 | | 10 | 189 |
| 1530 | 45.90 | .999 | | | | | | | | 198 | 199 | | | | | | | | | | | | | | 2 | 191 |
| | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 193 |

L. = 1297.0 IN.

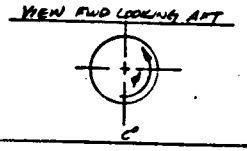
a. OMS POD, INSIDE

b. OMS POD OUTSIDE

TABLE VI. ORBITER VERTICAL TAIL PRESSURE TAP NUMBERS (LEFT SIDE ONLY)

| VERTICAL | | | X/CV | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $z_o$ FULL SCALE | $z_o$ MODEL SCALE | $\eta_v$ | 0 | .025 | .05 | .15 | .30 | .52 | .685 | .775 | .90 | No. TAPS | TAPS |
| 550 | 16.5 | .153 | 430 | 431 | 432 | 433 | 434 | 435 | 436 | 437 | | 8 | 8 |
| 600 | 18.0 | .316 | 438 | 439 | 440 | 441 | 442 | 443 | 444 | 445 | 446 | 9 | 17 |
| 690 | 20.7 | .600 | 447 | 448 | 449 | 450 | 451 | 452 | 453 | 454 | 455 | 9 | 26 |
| 765 | 22.95 | .840 | 456 | 457 | 458 | 459 | 460 | 461 | 462 | 463 | 464 | 9 | 35 |
| 792 | 23.76 | .925 | 465 | 466 | 467 | 468 | 469 | 470 | 471 | 472 | 473 | 9 | 44 |

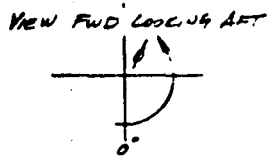
# TABLE VII. EXTERNAL TANK PRESSURE TAP NUMBERS




| $X_T$ ~ IN. Full Scale | $X_{TM}$ IN. Model Scale | $X_T/L_T$ | $\phi$ ~ DEGREES | | | | | | | | | | | | | | | | | NO TAPS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 | 30 | 60 | 90 | 120 | 135 | 147 | 162 | 180 | 198 | 213 | 225 | 240 | 270 | 300 | 330 | | |
| 298/329 | 8.937/9.871 | C | 474 | | | | | | | | | | | | | | | | | 1 |
| 346 | 10.38 | 0.0092 | 475 | 476 | 477 | 478 | 479 | | 480 | | 481 | | 482 | | 483 | 484 | 485 | 486 | | 12 |
| 363 | 10.89 | 0.0186 | 487 | 488 | 489 | 490 | 491 | 492 | 493 | 494 | 495 | 496 | 497 | 498 | 499 | 500 | 501 | 502 | | 16 |
| 403 | 12.09 | 0.0400 | 503 | 504 | 505 | 506 | 507 | 508 | 509 | 510 | 511 | 512 | 513 | 514 | 515 | 516 | 517 | 518 | | 16 |
| 443 | 13.44 | 0.0666 | 519 | 520 | 521 | 522 | 523 | 524 | 525 | 526 | 527 | 528 | 529 | 530 | 531 | 532 | 533 | 534 | | 16 |
| 568 | 17.04 | 0.1292 | 535 | 536 | 537 | 538 | 539 | 540 | 541 | 542 | 543 | 544 | 545 | 546 | 547 | 548 | 549 | 550 | | 16 |
| 628 | 20.64 | 0.1944 | 551 | 552 | 553 | 554 | 555 | 556 | 557 | 558 | 559 | 560 | 561 | 562 | 563 | 564 | 565 | 566 | | 16 |
| 718 | 21.54 | 0.2106 | 567 | 568 | 569 | 570 | 571 | 572 | 573 | 574 | 575 | 576 | 577 | 578 | 579 | 580 | 581 | 582 | | 16 |
| 758 | 22.74 | 0.2323 | 583 | 584 | 585 | 586 | 587 | 588 | 589 | 590 | 591 | 592 | 593 | 594 | 595 | 596 | 597 | 598 | | 16 |
| 803 | 24.24 | 0.2594 | 599 | 600 | 601 | 602 | 603 | 604 | 605 | 606 | 607 | 608 | 609 | 610 | 611 | 612 | 613 | 614 | | 16 |
| 850 | 25.50 | 0.2821 | 615 | 616 | 617 | 618 | 619 | 620 | 621 | 622 | 623 | 624 | 625 | 626 | 627 | 628 | 629 | 630 | | 16 |
| 950 | 28.50 | 0.3362 | 631 | 632 | 633 | 634 | 635 | 636 | 637 | 638 | 639 | 640 | 641 | 642 | 643 | 644 | 645 | 646 | | 16 |
| 1050 | 31.50 | 0.3904 | 647 | 648/662 | 649 | 650 | 651 | 652 | 653 | 654 | 655 | 656 | 657 | 658 | 659 | 660 | 661 | -- | | 16 |
| 1150 | 34.50 | 0.4445 | 663 | 664 | 665 | 666 | 667 | 668 | 669 | 670 | 671 | 672 | 673 | 674 | 675 | 676 | 677 | 678 | | 16 |
| 1250 | 37.50 | 0.4987 | 679 | 680 | 681 | 682 | 683 | 684 | 685 | 686 | 687 | 688 | 689 | 690 | 691 | 692 | 693 | 694 | | 16 |
| 1350 | 40.50 | 0.5528 | 695 | 696 | 697 | 698 | 699 | 700 | 701 | 702 | 703 | 704 | 705 | 706 | 707 | 708 | 709 | 710 | | 16 |
| 1500 | 45.00 | 0.6340 | 711 | 712 | 713 | 714 | 715 | 716 | 717 | 718 | 719 | 720 | 721 | 722 | 723 | 724 | 725 | 726 | | 16 |
| 1700 | 51.00 | 0.7423 | 727 | 728 | 729 | 730 | 731 | 732 | 733 | 734 | 735 | 736 | 737 | 738 | 739 | 740 | 741 | 742 | | 16 |
| 1900 | 57.00 | 0.8506 | 743 | 744 | 745 | 746 | 747 | 748 | 749 | 750 | 751 | 752 | 753 | 754 | 755 | 756 | 757 | 758 | | 16 |
| 2040 | 61.20 | 0.9264 | 759 | 760 | 761 | 762 | 763 | 764 | 765 | 766 | 767 | 768 | 769 | 770 | 771 | 772 | 773 | 774 | | 16 |
| 2146 | 64.38 | 0.9838 | 775 | 776 | 777 | 778 | 779 | | 780 | | 781 | | 782 | | 783 | 784 | 785 | 786 | | 12 |
| STING CAVITY | | | 787 | | | | | | | | | | | | | | | | | 1 |
| | | | | | | | | | | | | | | | | | | | Σ TAPS | 314 |

$L_T$ = 1846.91 IN.

# TABLE VIII LEFT SRB PRESSURE TAP NUMBERS



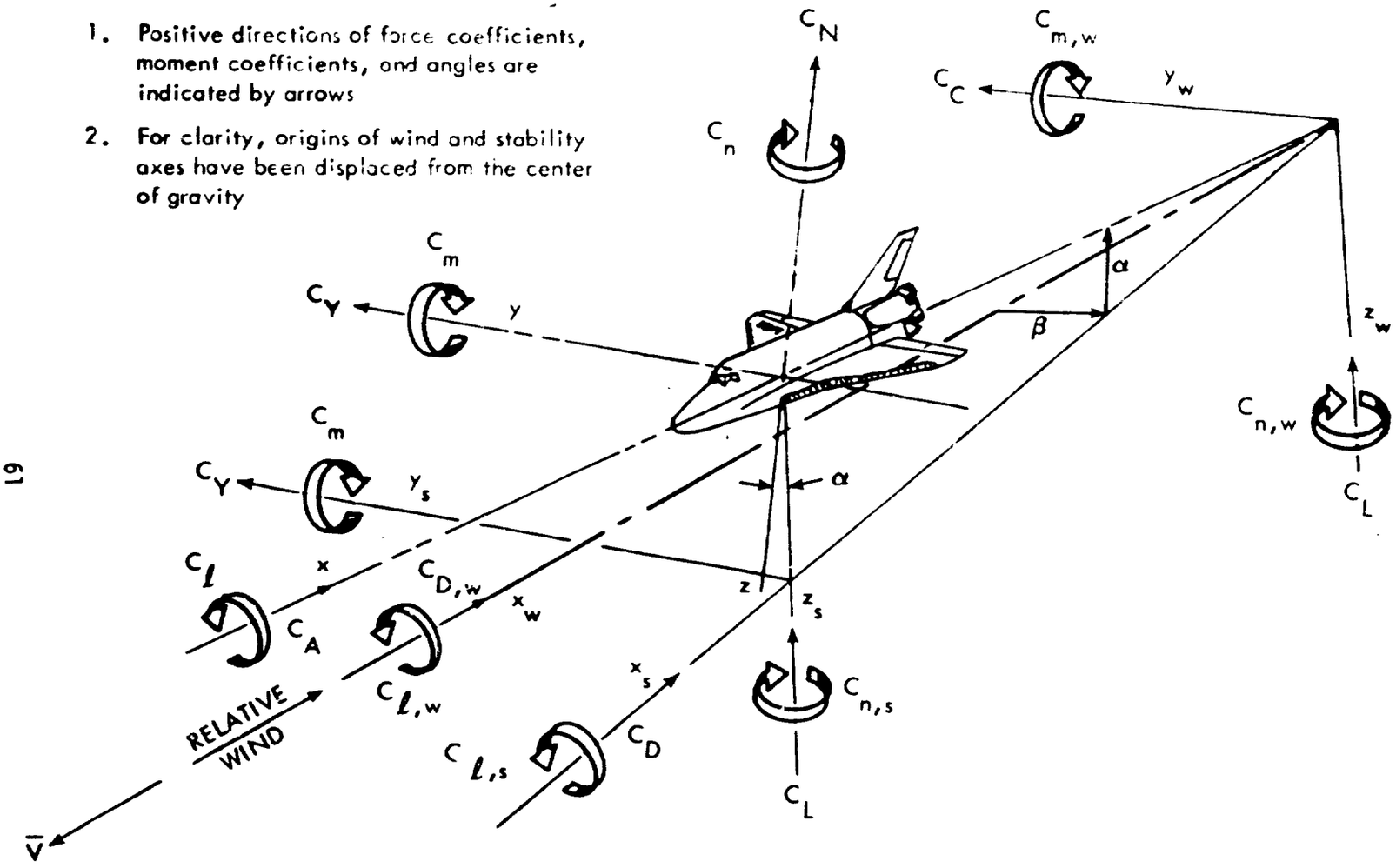

| | $X_s$ ~ IN. FULL SCALE | $X_s$ ~ IN. MODEL SCALE | $X_s/l_s$ | φ ~ DEGREES | | | | | | | | | NO. TAPS | Σ NO TAPS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 0 | 45 | 90 | 135 | 180 | 225 | 270 | 315 | | | |
| | 200 | 6 | 0 | 788 | | | | | | | | | 1 | 1 |
| | 260 | 7.8 | 0.0335 | 789 | 790 | 791 | 792 | 793 | 794 | 795 | 796 | | 8 | 9 |
| | 370 | 11.1 | 0.0950 | 797 | 798 | 799 | 800 | 801 | 802 | 803 | 804 | | 8 | 17 |
| | 400 | 12.0 | 0.1118 | 805 | 806 | 807 | 808 | 809 | 810 | 811 | 812 | | 8 | 25 |
| | 450 | 13.5 | 0.1397 | 813 | 814 | 815 | 816 | 817 | 818 | 819 | 820 | | 8 | 33 |
| | 550 | 16.5 | 0.1956 | 821 | 822 | 823 | 824 | 825 | 826 | 827 | 828 | | 8 | 41 |
| | 700 | 21.0 | 0.2794 | 829 | 830 | 831 | 832 | 833 | 834 | 835 | 836 | | 8 | 49 |
| | 850 | 25.5 | 0.3632 | 837 | 838 | 839 | 840 | 841 | 842 | 843 | 844 | | 8 | 57 |
| | 1050 | 31.5 | 0.4250 | 845 | 846 | 847 | 848 | 849 | 850 | 851 | 852 | | 8 | 65 |
| | 1250 | 37.5 | 0.5867 | 853 | 854 | 855 | 856 | 857 | 858 | 859 | 860 | | 8 | 73 |
| | 1450 | 43.5 | 0.6985 | 861 | 862 | 863 | 864 | 865 | 866 | 867 | 868 | | 8 | 81 |
| * | 1503 | 45.09 | 0.7280 | 869 | | | | 871 | | 872 | | | 3 | 84 |
| * | 1505 | 45.15 | 0.7290 | 873 | | 874 | | 875 | | 876 | | | 4 | 88 |
| * | 1517 | 45.51 | 0.7360 | 877 | | 878 | | 879 | | 880 | | | 4 | 92 |
| * | 1519 | 45.57 | 0.737 | 881 | | | | 883 | | 884 | | | 3 | 95 |
| | 1650 | 49.5 | 0.8102 | 885 | 886 | 887 | 888 | 889 | 890 | 891 | 892 | | 8 | 103 |
| | 1750 | 52.5 | 0.8661 | 893 | 894 | 895 | 896 | 897 | 898 | 899 | 900 | | 8 | 111 |
| | | | | | | | | | | | | | | |
| * | 1832.9 | 54.99 | 0.9120 | 909 | | 910 | | 911 | | 912 | | | 4 | 115 |
| * | 1833.9 | 55.02 | 0.9130 | 913 | | 914 | | 915 | | 916 | | | 4 | 119 |
| | 1872.2 | 56.17 | 0.9394 | 917 | 918 | 919 | 920 | 921 | 922 | 923 | 924 | | 8 | 127 |
| | 1911.7 | 57.35 | 0.9565 | 925 | 926 | 927 | 928 | 929 | 930 | 931 | 932 | | 8 | 135 |
| | SKIRT END | | | 933 | | | 934 | | | 935 | | | 3 | 138 |
| | NOZZLE BASE ℄ | | | 936 | | | | | | | | | 1 | 139 |

$l_s$ = 1789.60 IN.

* PRESSURE TAPS AT 77.5 IN. RADIUS ON THE STRUCTURAL RINGS

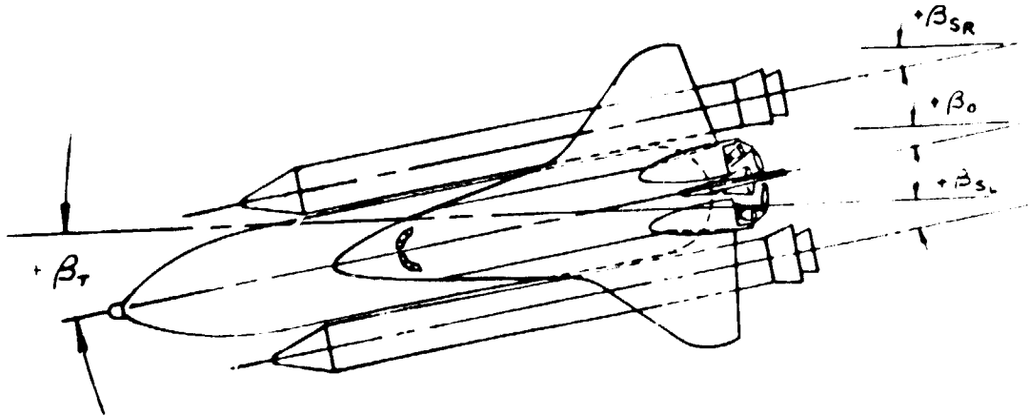
**Notes:**

1. Positive directions of force coefficients, moment coefficients, and angles are indicated by arrows
2. For clarity, origins of wind and stability axes have been displaced from the center of gravity

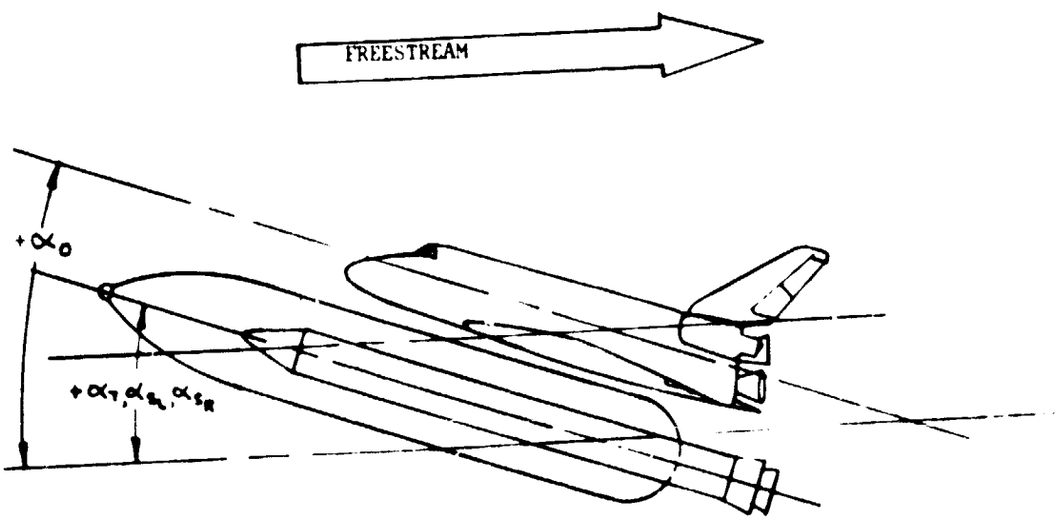



a. Forces and Moments

Figure 1. - Axis Systems.



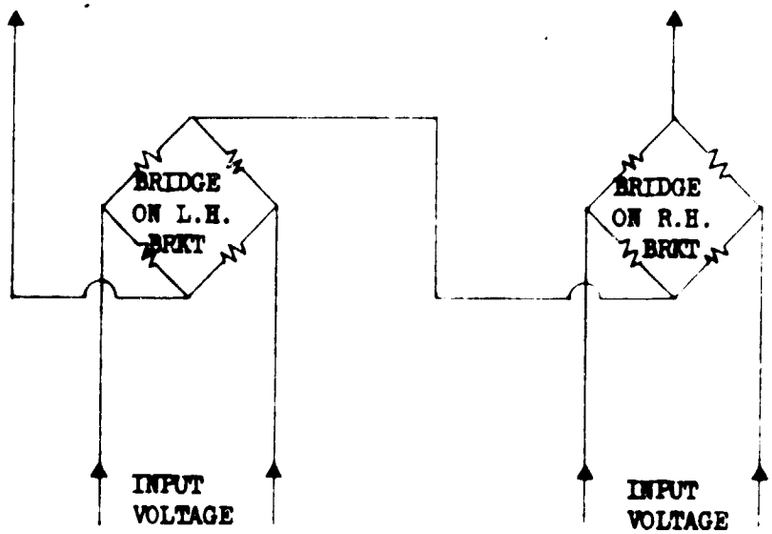

SIDESLIP ANGLES



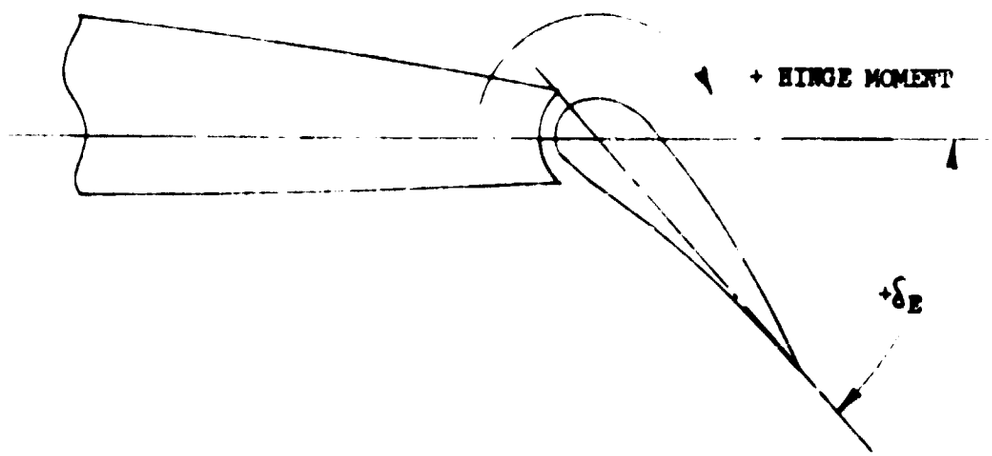

PITCH ANGLES

b. Model Attitude Definition
Figure 1. - Continued.

OUTPUT VOLTAGE

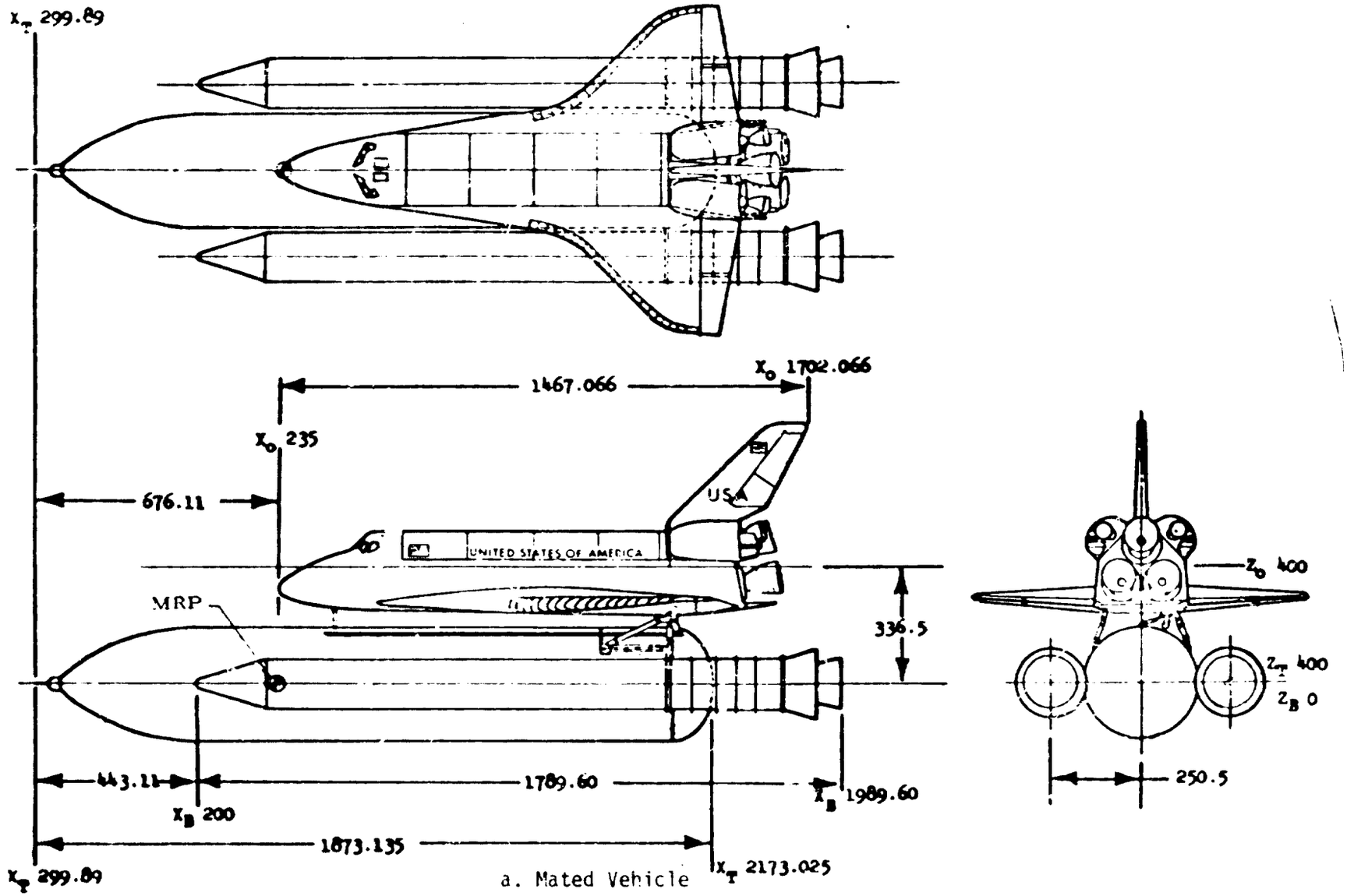



ELEVON HINGE MOMENT WIRING DIAGRAM
TYPICAL FOR INBOARD AND OUTBOARD ELEVONS




c. Elevon Electrical Hookup and Sign Conventions

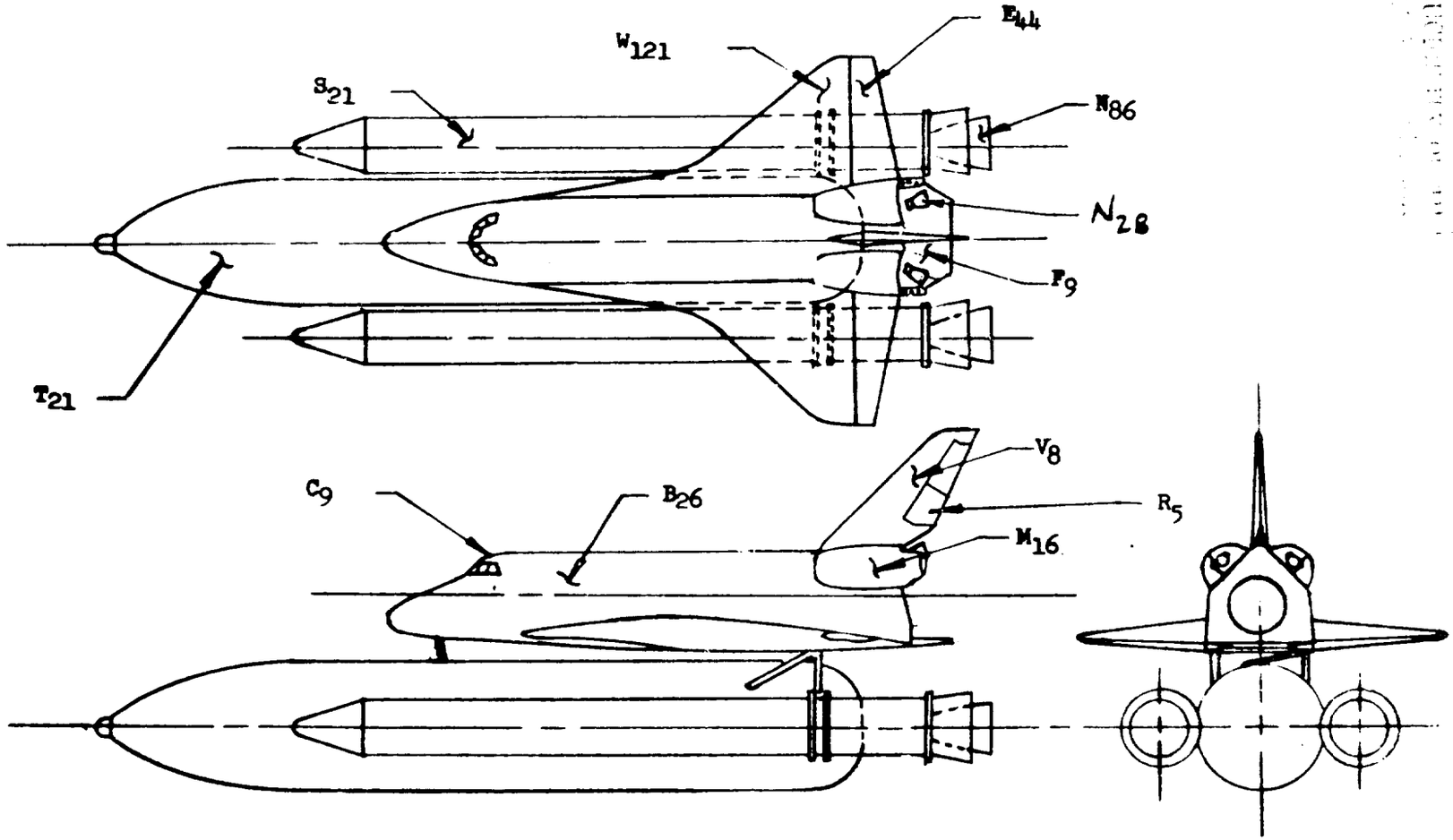
Figure 1. - Concluded.




a. Mated Vehicle

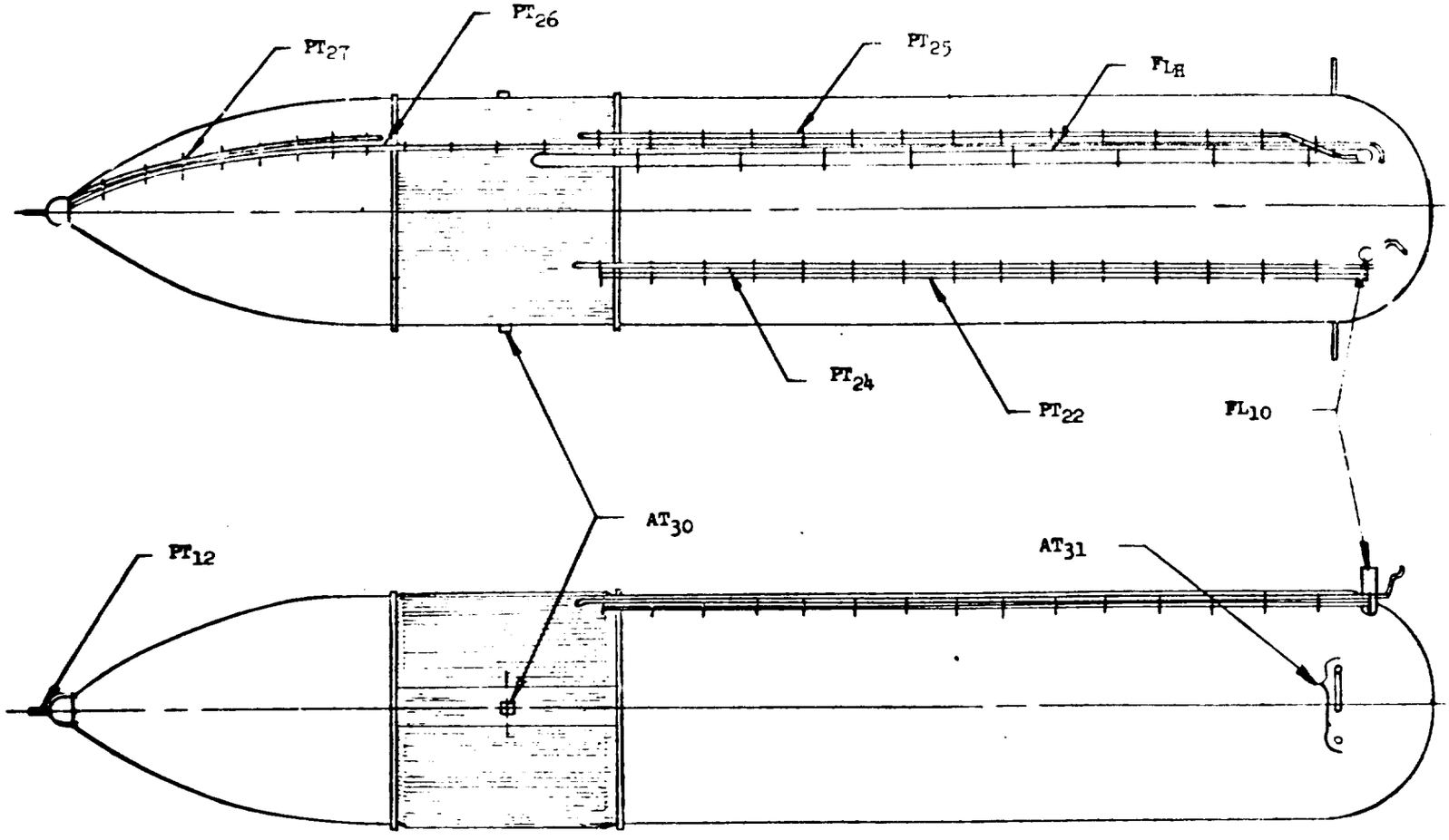
Figure 2. - Model sketches.

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR



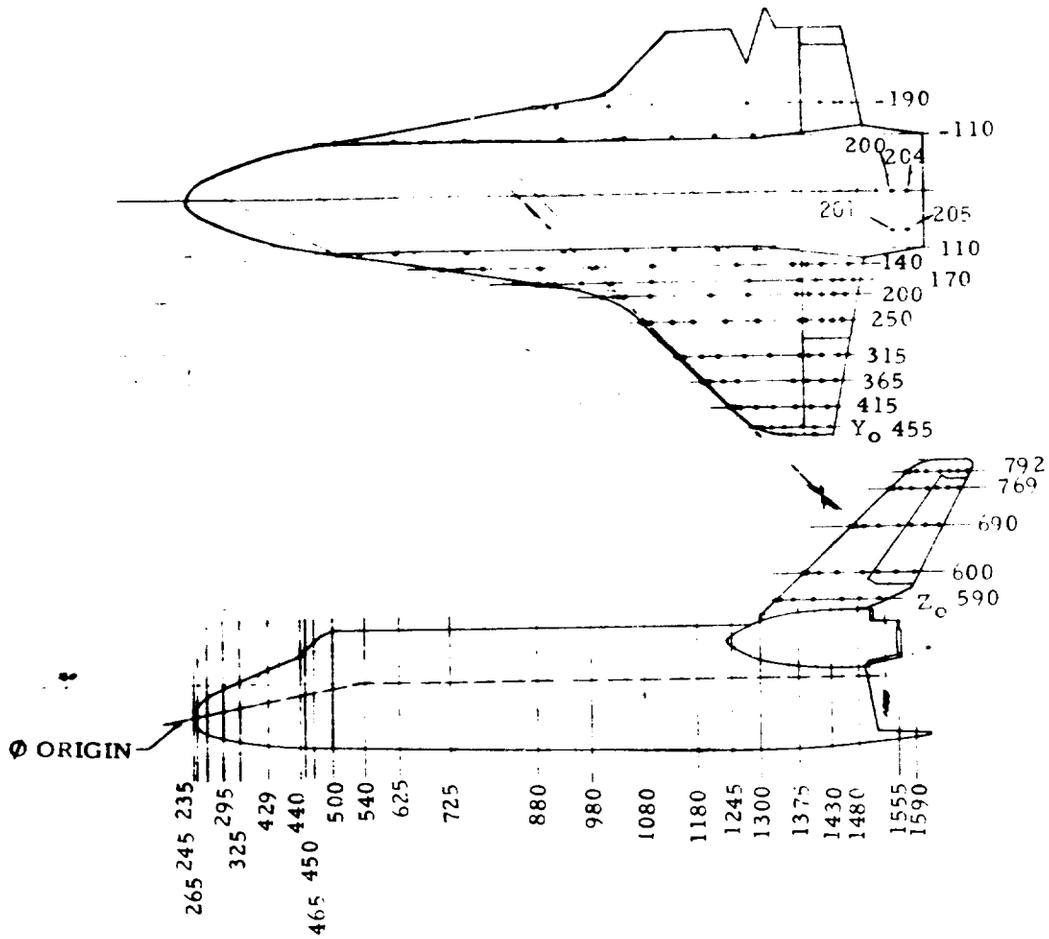

b. LVA Integrated Vehicle Three View

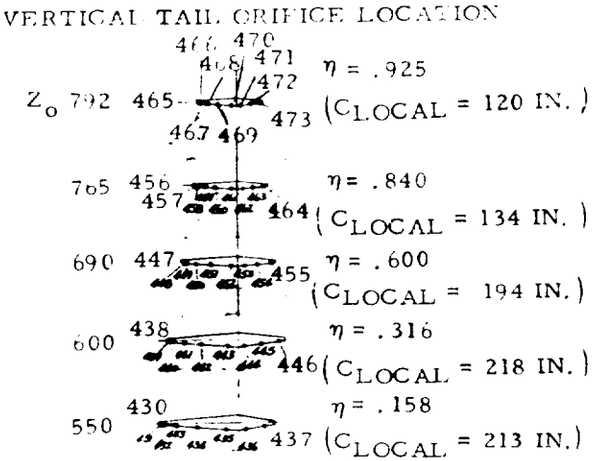
Figure 2. - Continued.

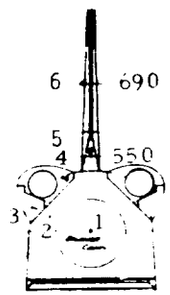



c. ($T_{28}$) External Tank Protuberances

Figure 2. - Continued.



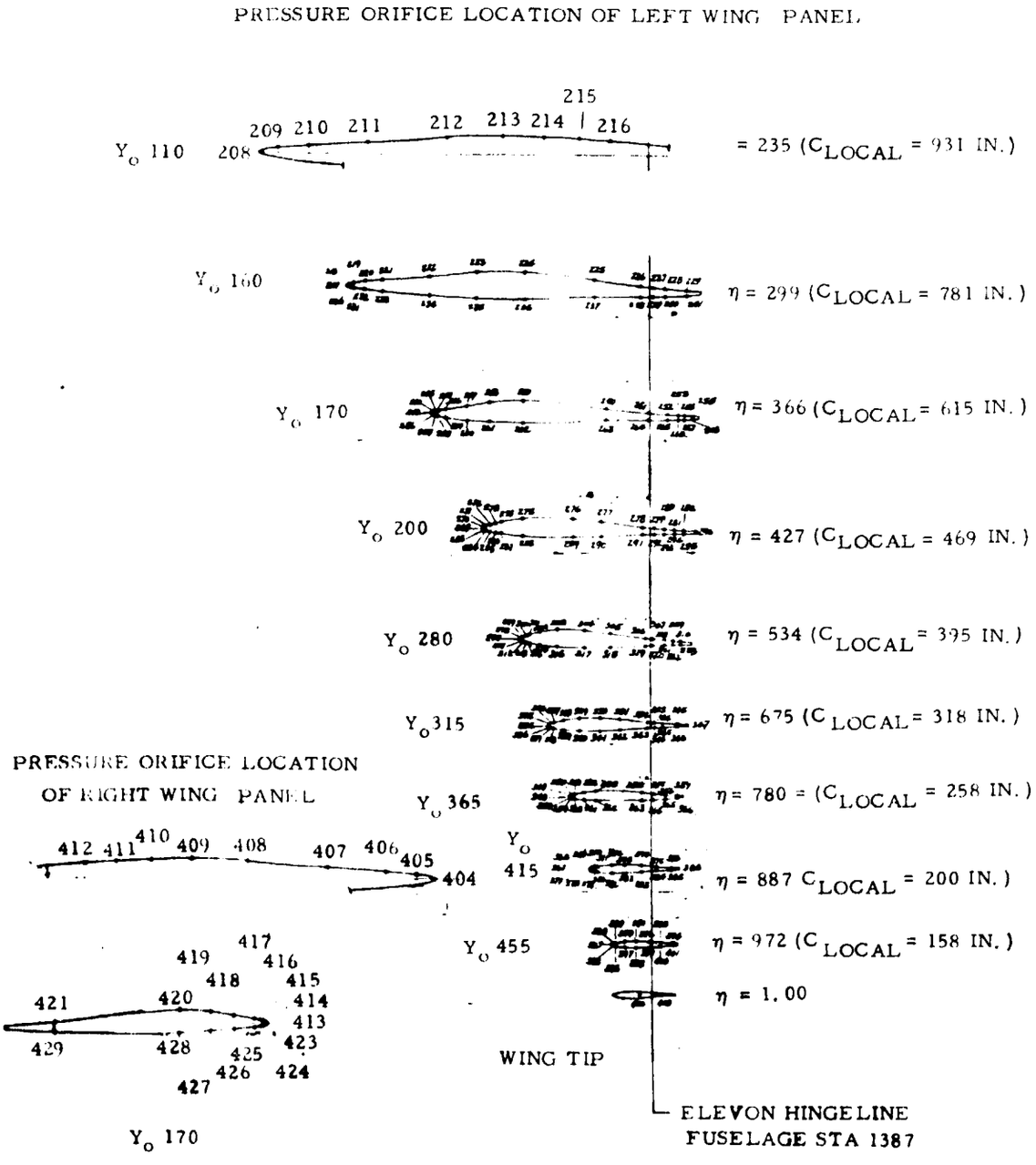




ORBITER BASE
VIEW LOOKING FORWARD

d. Orbiter Upper Wing and Vertical Tail Pressure Tap Locations

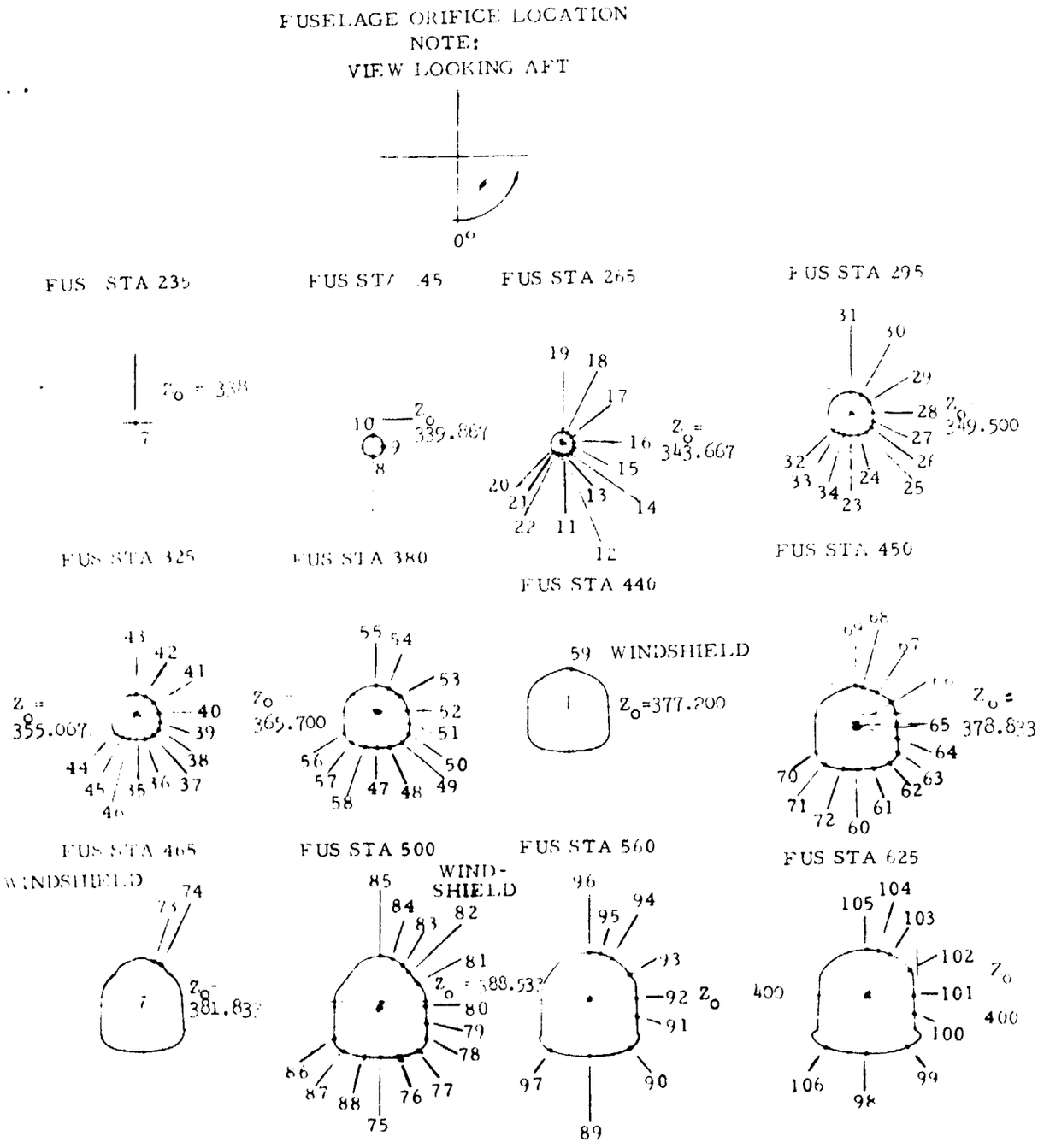
Figure 2. - Continued.

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR



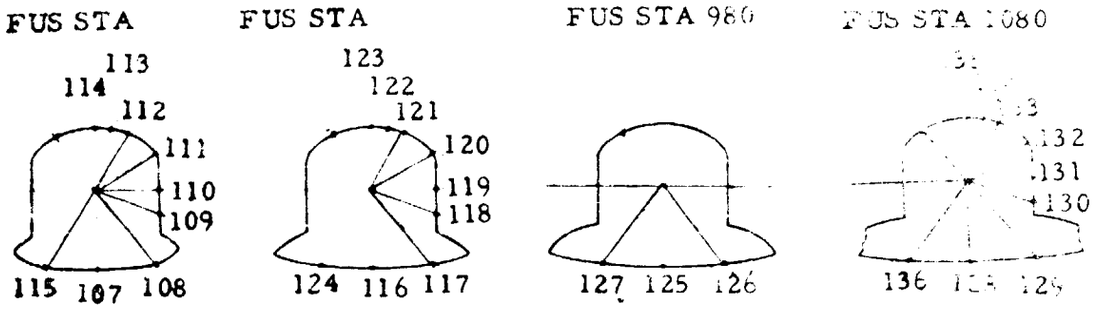

e. Orbiter Wing Pressure Tap Locations

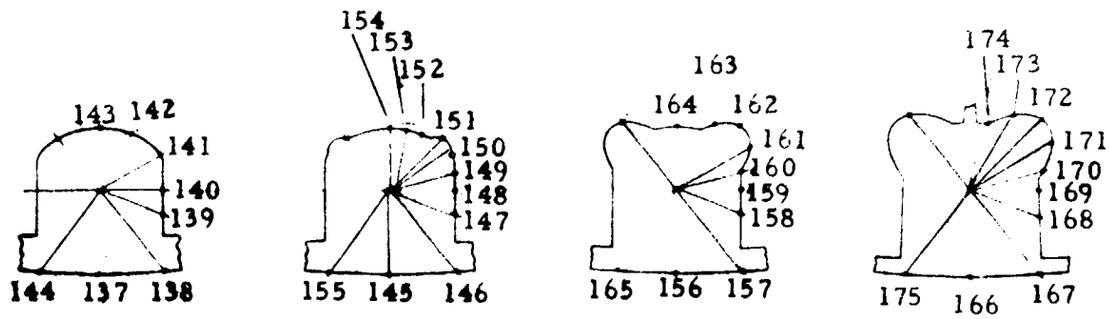
Figure 2. - Continued.

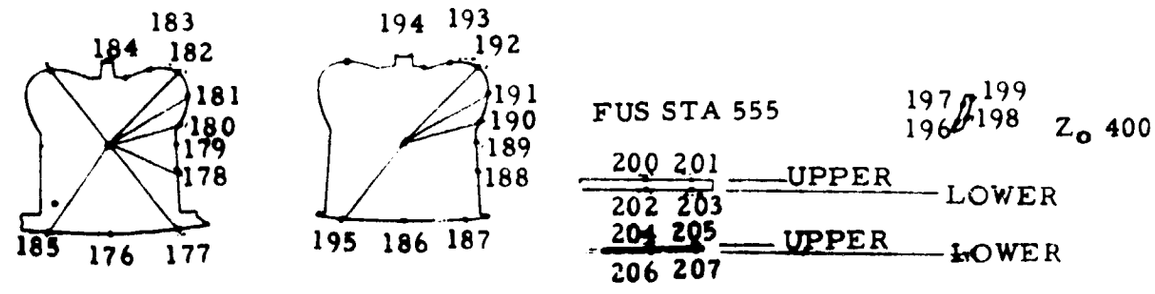



f. Orbiter Forward Fuselage Pressure Tap Locations

Figure 2. - Continued.

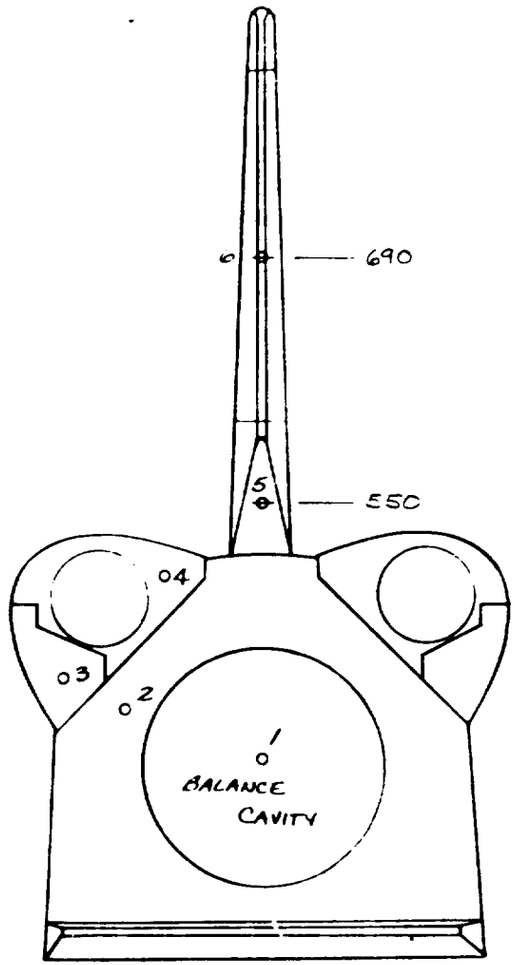



g. Orbiter Aft Fuselage Pressure Tap Locations

Figure 2. - Continued.



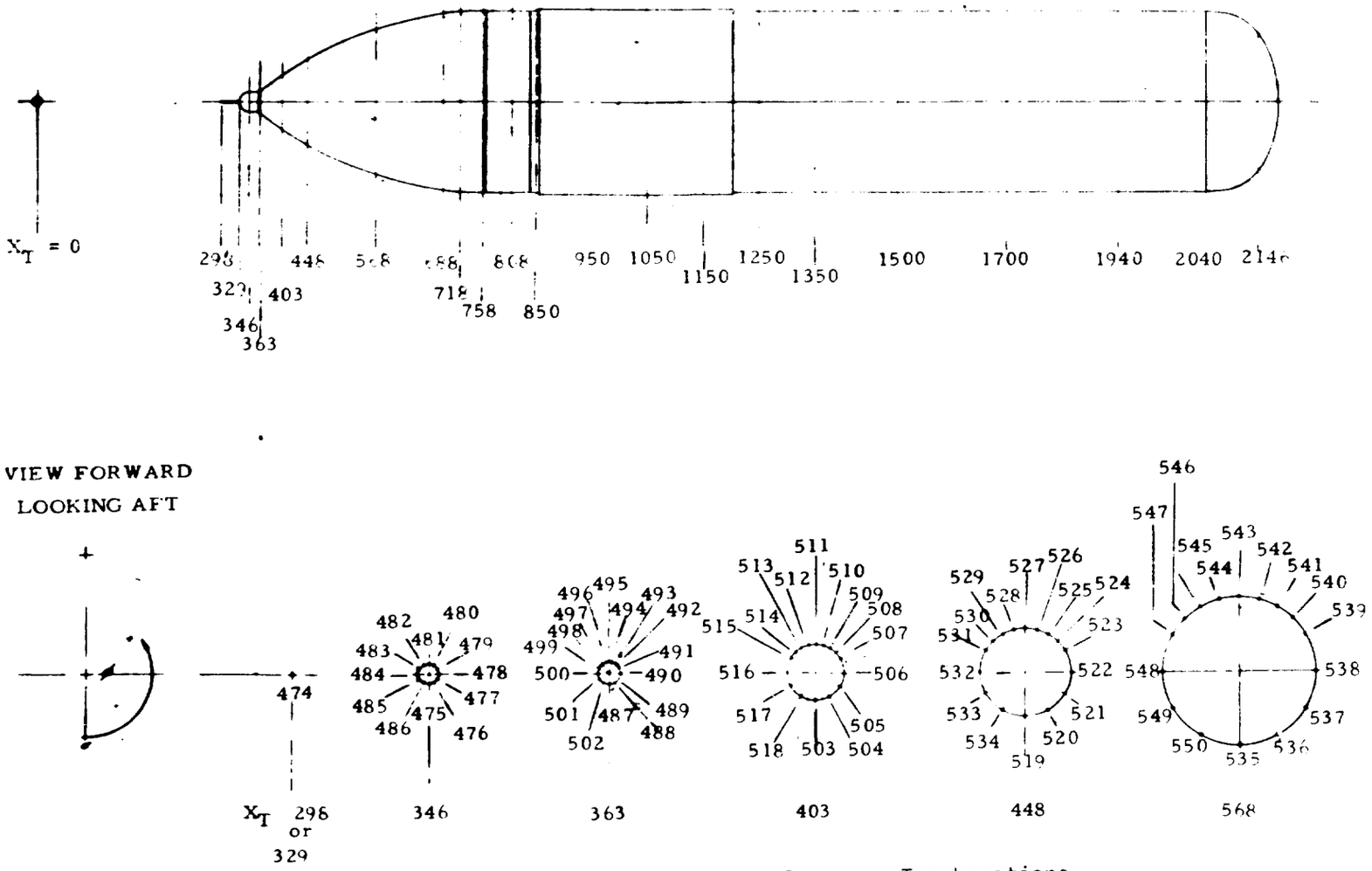

ORBITER BASE PRESSURE TAPS

BODY FLAP PRESSURE TAP NUMBERS

| ORBITER ~ $X_O$ | | | $\phi$ ~ 056. | | | |
|---|---|---|---|---|---|---|
| FULL SCALE | MODEL SCALE | $X_O/L_O$ | 0 | 40 | NO TAPS | Σ NO TAPS |
| $1555_U$ | 46.65 | | 200 | 201 | 2 | 2 |
| $1555_L$ | 46.65 | | 202 | 203 | 2 | 4 |
| $1590_U$ | 47.70 | | 204 | 205 | 2 | 6 |
| $1590_L$ | 47.70 | | 206 | 207 | 2 | 8 |

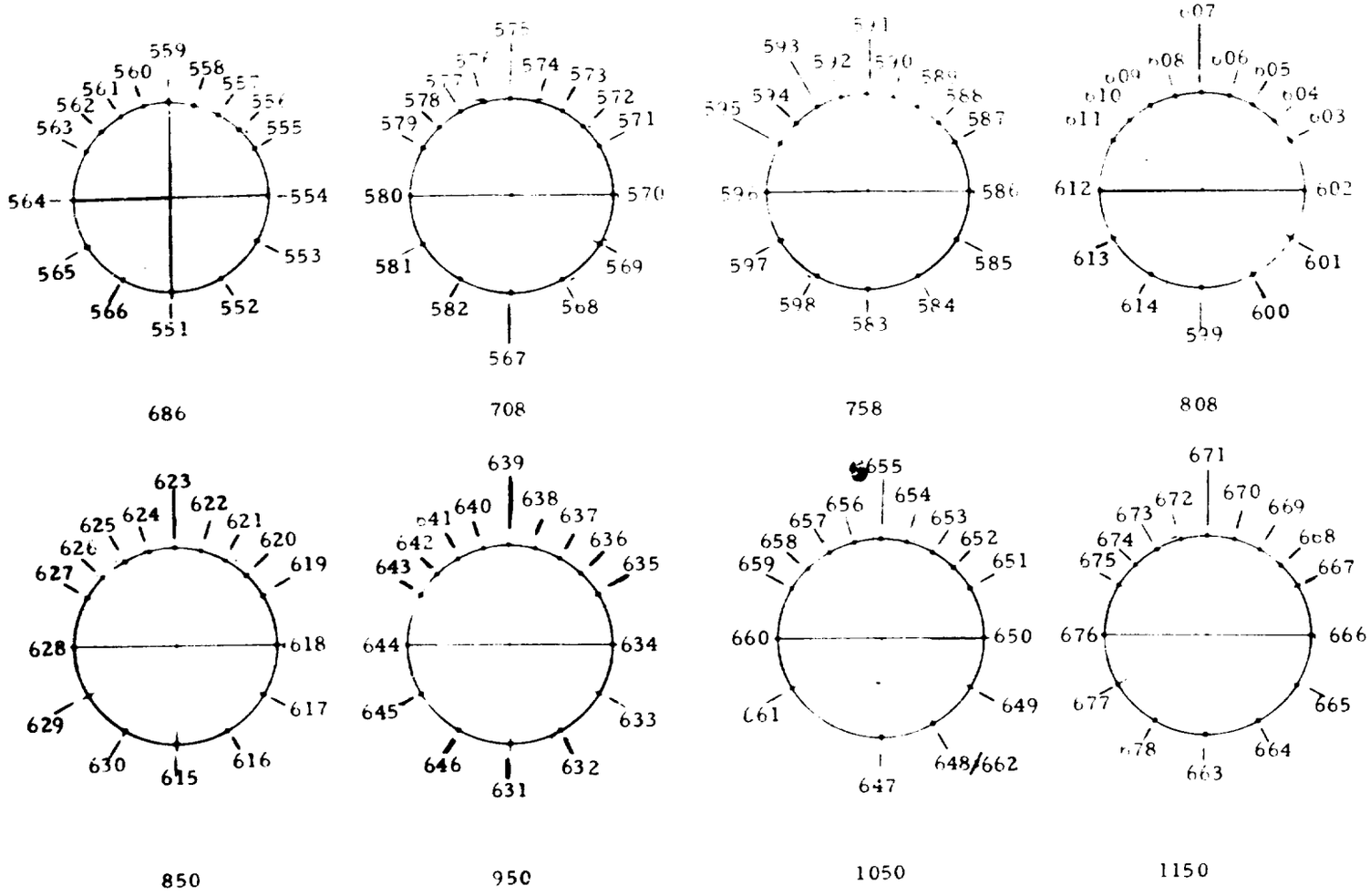
h. Orbiter Base Pressure Tap Locations

Figure 2. - Continued.



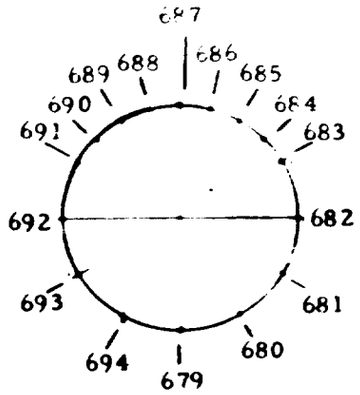

i. External Tank Forward Pressure Tap Locations

Figure 2. - Continued.

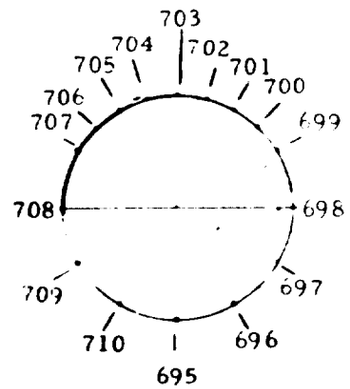



j. External Tank Mid Pressure Tap Locations

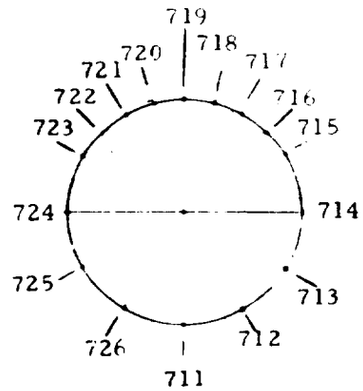
Figure 2. - Continued.



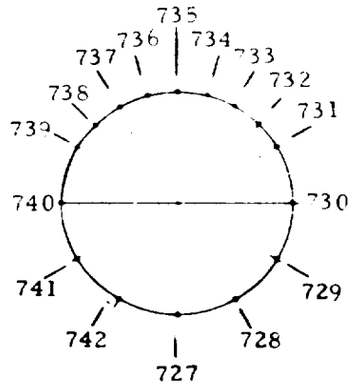

1250



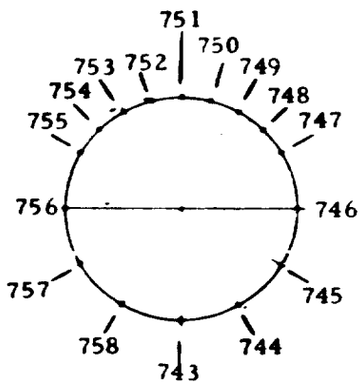

1350



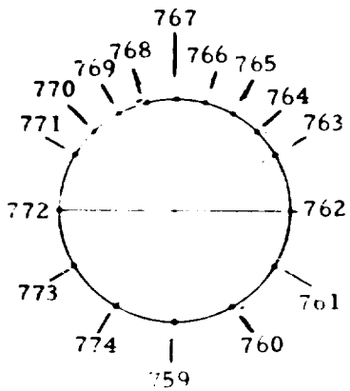

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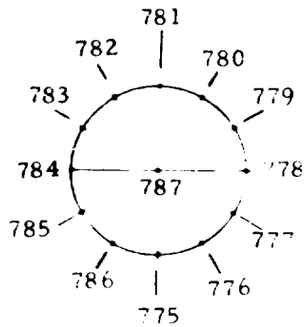

1700




1900

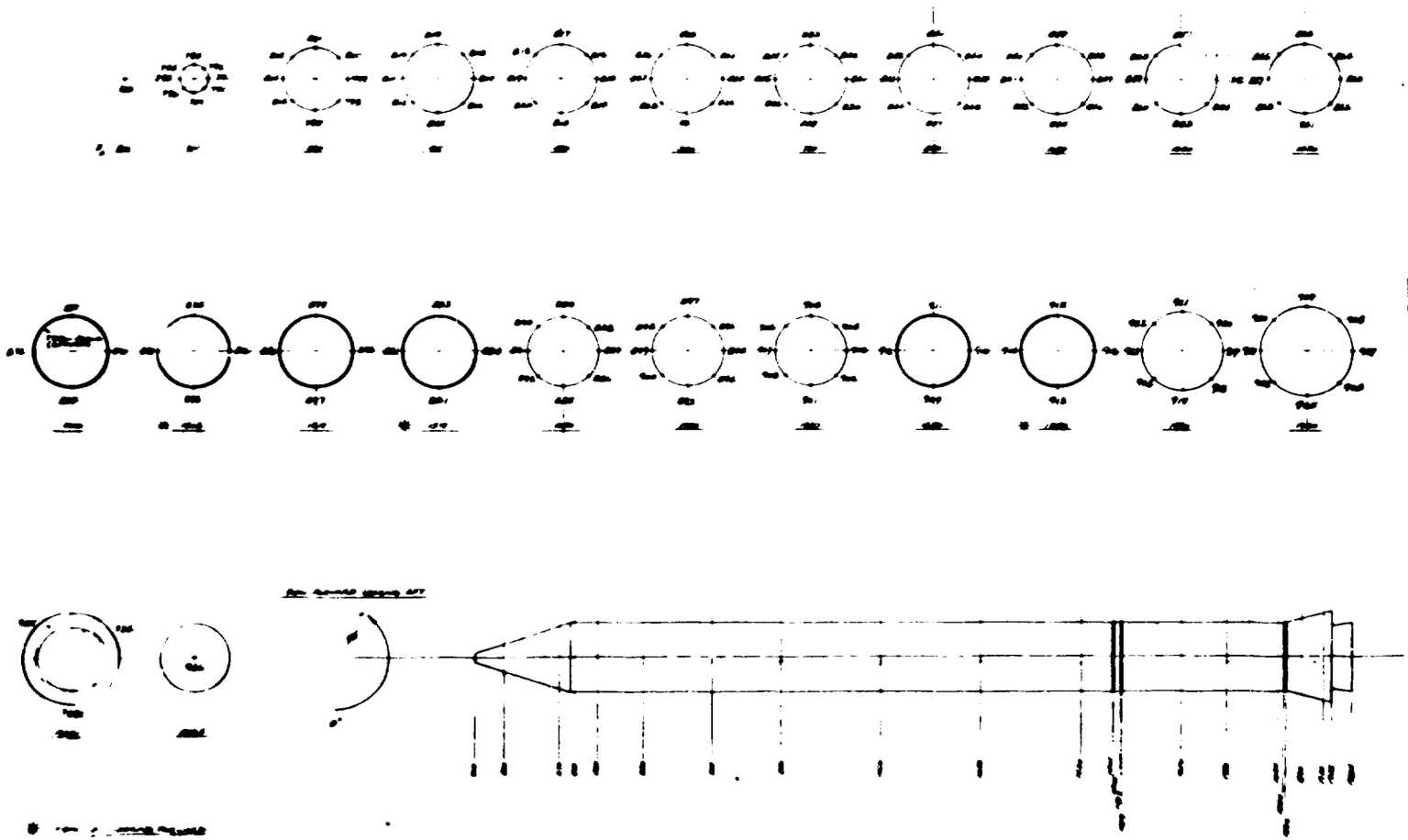



2040



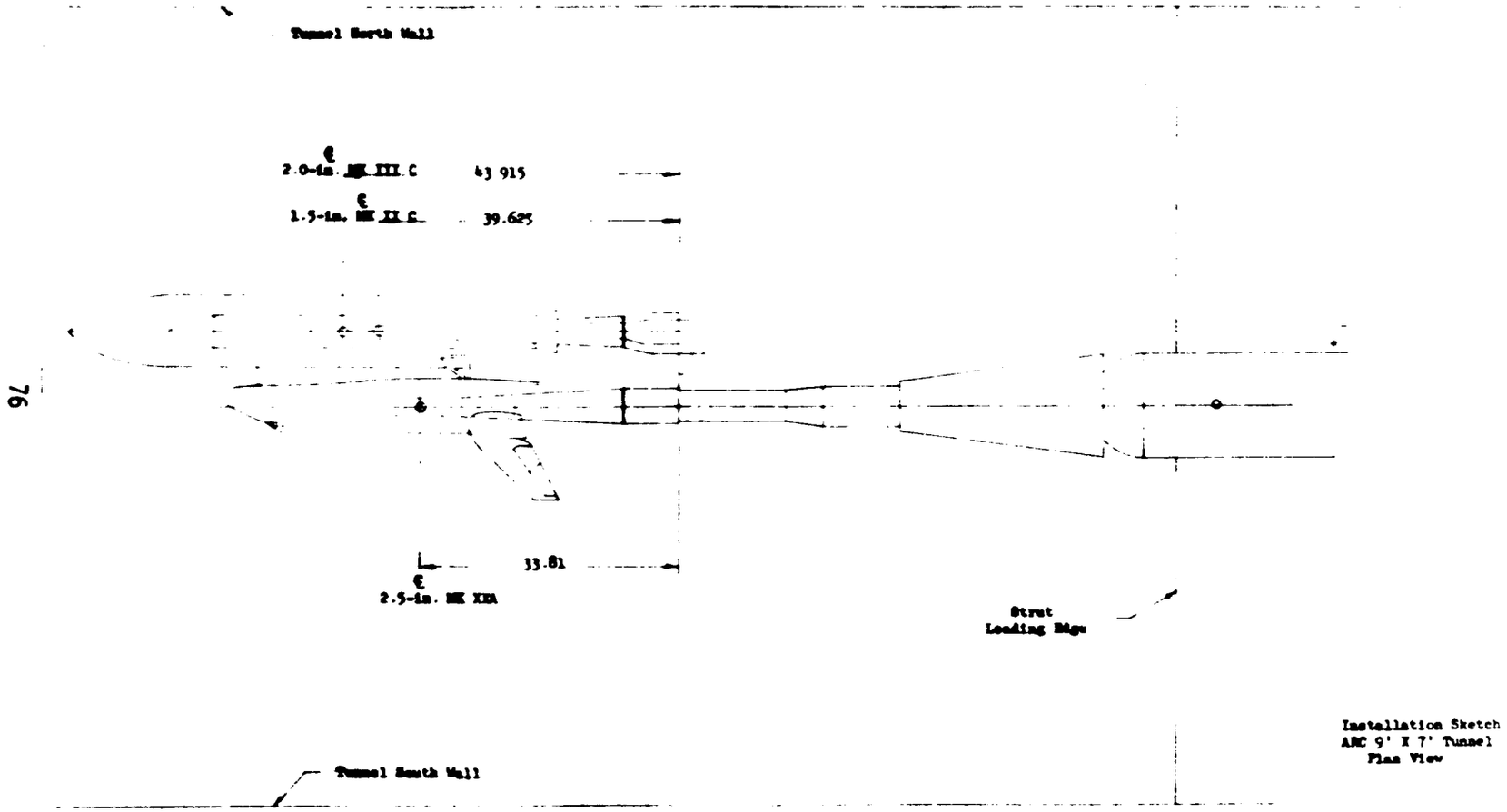

k. External Tank Aft Pressure Tap Locations

Figure 2. - Continued.



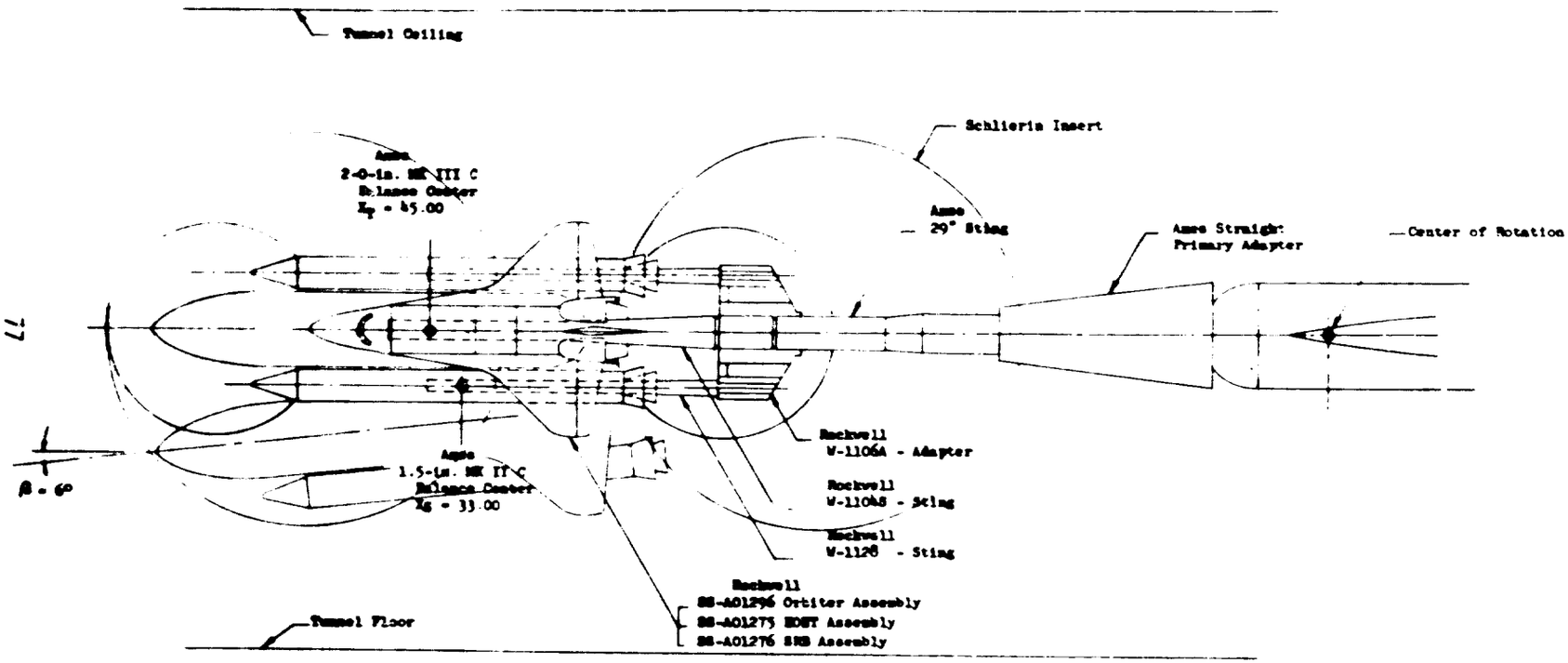
I. SRB Pressure Tap Locations

Figure 2. - Continued.




m. Model Installation Side View

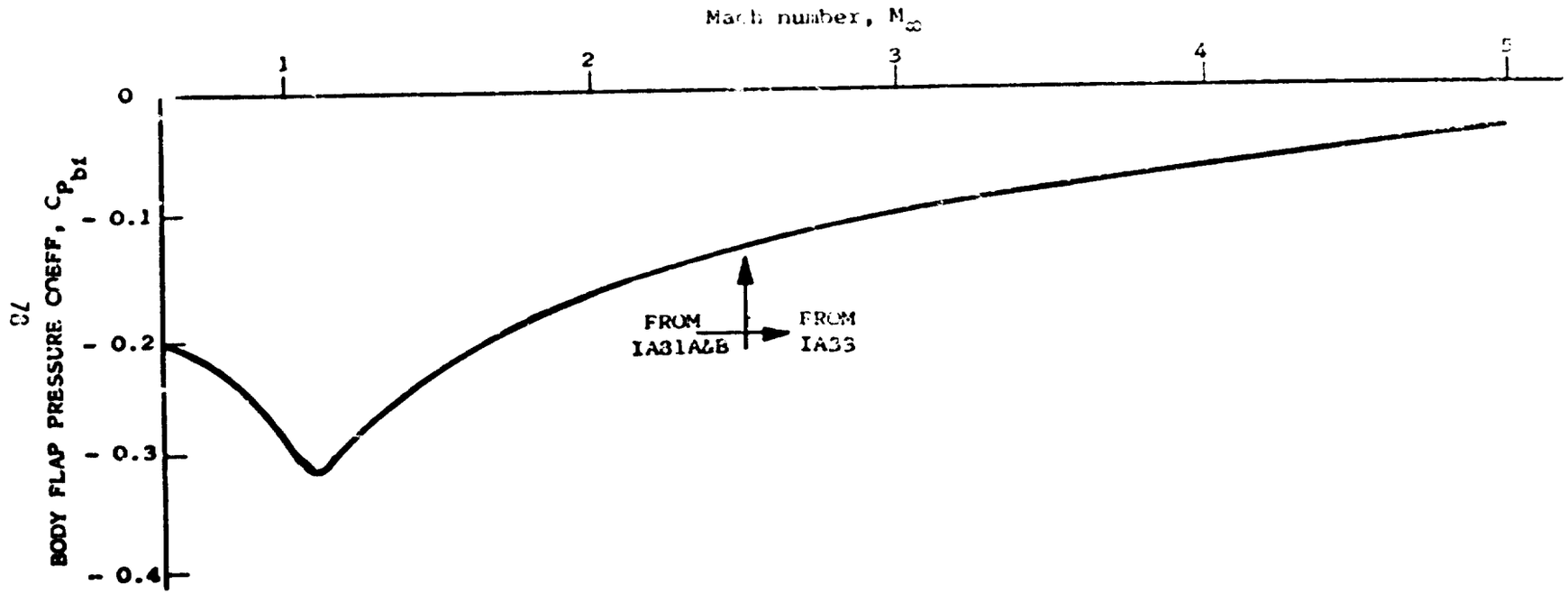
Figure 2. - Continued.




Installation Sketch
ARC 9' X 7' Tunnel
Side View Looking North

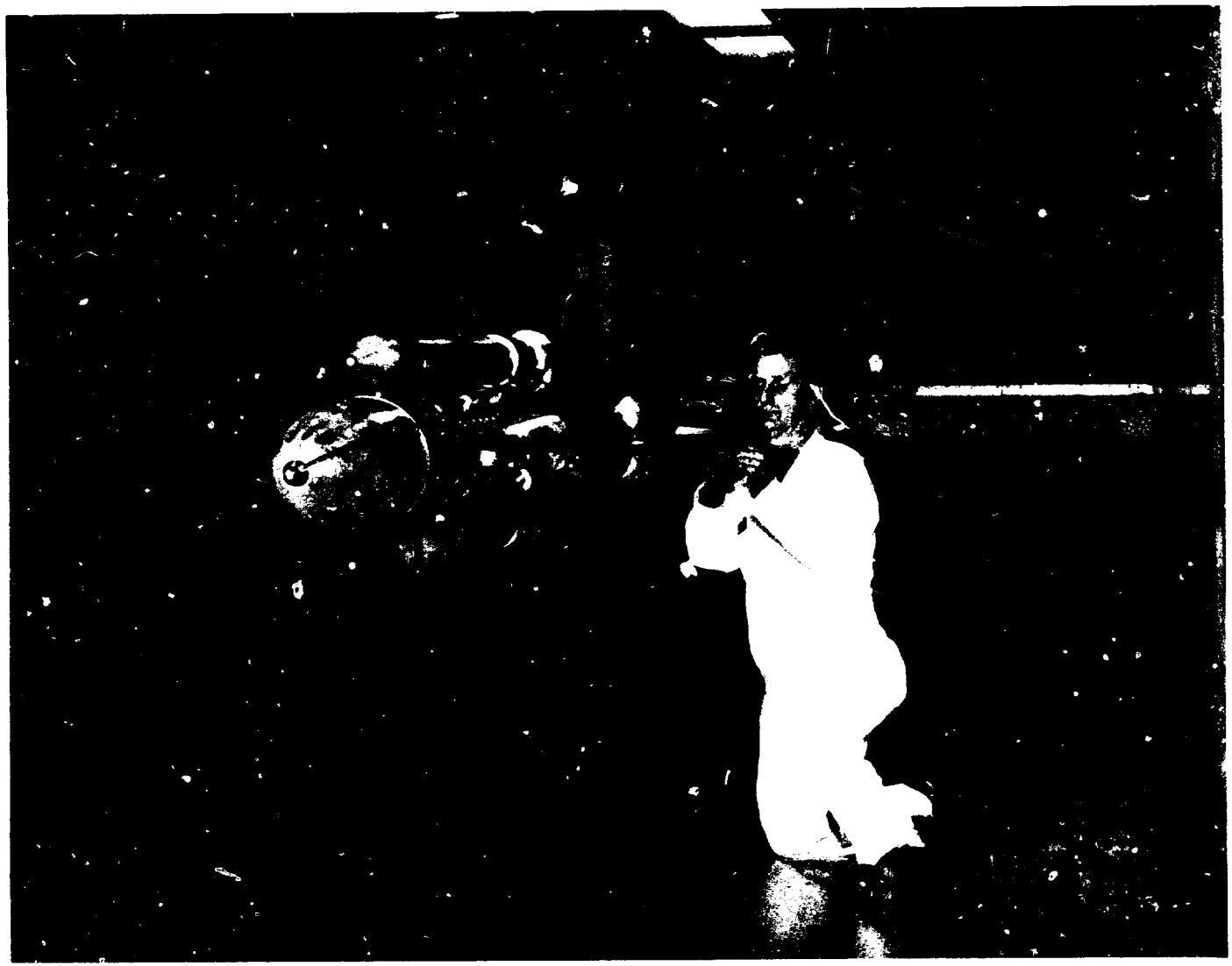
n. Model Installation Top View

Figure 2. - Continued.



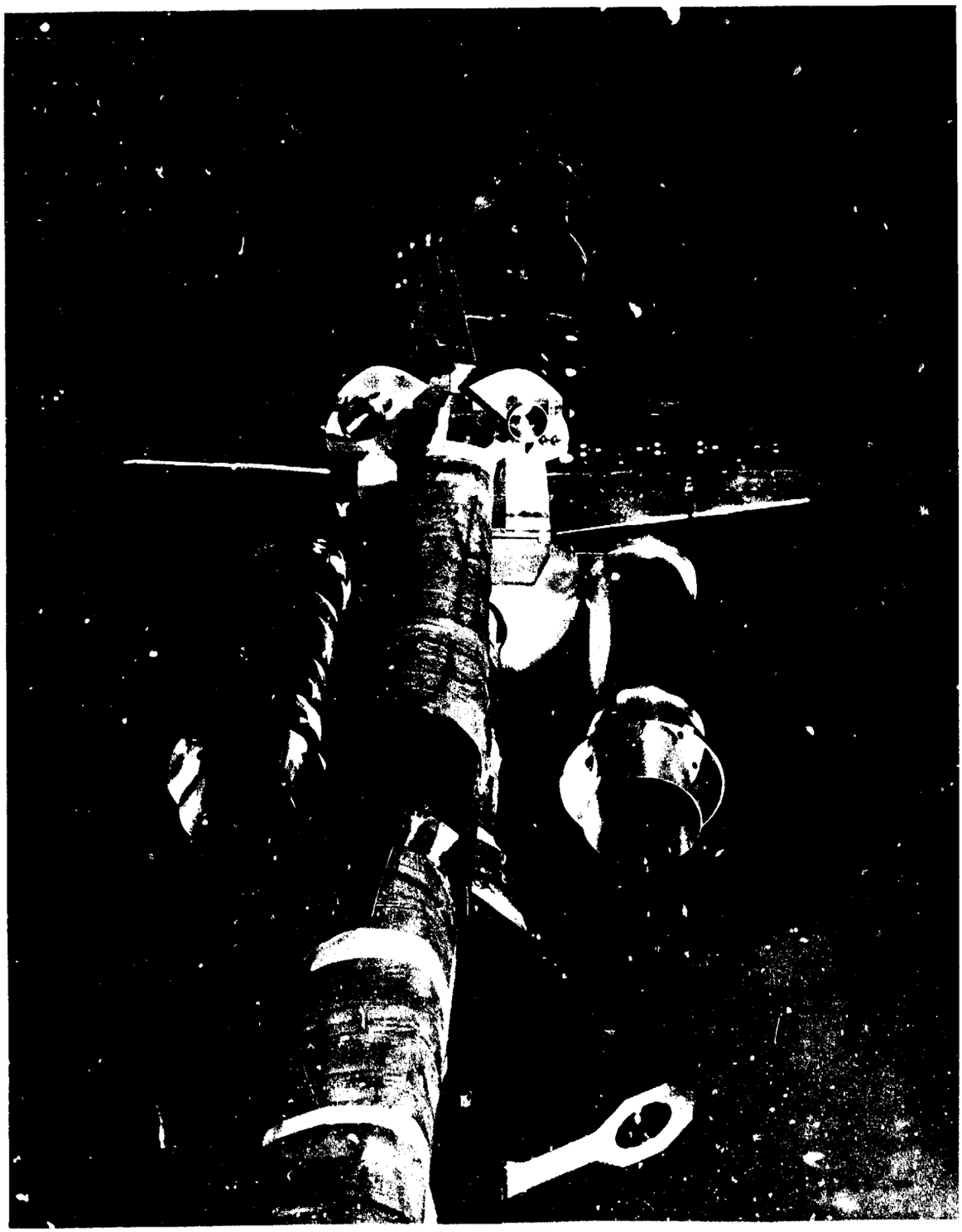

o. Orbiter Body Flap Pressure Coefficients

Figure 2. - Concluded.



a. Side View

Figure 3. - Model photographs.



b. Rear View

Figure 3. - Concluded.

## APPENDIX

## TABULATED SOURCE DATA

| | | |
|---|---|---|
| VOLUME 1 | | (Force) |
| VOLUME 3 | Pages 1-728 | (Pressure) |
| VOLUME 4 | Pages 729-1459 | (Pressure) |
| VOLUME 5 | Pages 1460-2163 | (Pressure) |

Tabulations of plotted data may be obtained from Data Management Services upon request.

DATE 08 OCT 75 1A81B - PRESSURE SOURCE DATA TABULATION PAGE 1

ARC97-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB30) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 978.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.500 RN/FT = 3.000
ELV-IB = .000 ELV-OB = .000
RUDDER = .000 SPDBRK = 55.000

BETAO ( 1) = .230 ALPHAO( 1) = -8.381

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.7293 | .8342 | | .1506 | .1604 | .7533 | | .1387 | | .0535 | .3042 | .0455 | .0527 | -.0532 | -.0375 |
| 20.000 | | | | .1417 | .1595 | .5842 | | .1417 | | .0738 | | | | | |
| 40.000 | | | | .1583 | .1233 | .3907 | | .2460 | | .0000 | .1381 | .0679 | .0819 | -.0347 | .0223 |
| 55.000 | | | | .2997 | .1850 | .1558 | | .3449 | | .2487 | | | | | |
| 70.000 | | | | .3579 | .2523 | .1294 | | .1841 | | .2448 | .0980 | .0670 | .0584 | .0158 | |
| 90.000 | | .8134 | | .4053 | .2917 | .1724 | | .1255 | | .0000 | .1090 | .0819 | .0280 | .0242 | |
| 120.000 | | | | .5198 | .3808 | .3258 | | .3610 | | .2871 | .0813 | -.0963 | -.0145 | .0358 | |
| 140.000 | | | | | | | | | | .2500 | | | | | |
| 150.000 | | | .6787 | .5485 | .4712 | .4102 | | | | .2235 | -.0403 | -.0127 | .0016 | .0463 | |
| 151.000 | | | | | | | | | .9438 | | | | | | |
| 156.000 | | | | | | | | 1.1076 | | | | | | | |
| 162.000 | | | | | | | | | 1.2519 | | | | | | |
| 165.000 | | | | | | | | | | .1596 | -.0352 | .0099 | .0239 | .0256 | |
| 169.000 | | | | | | | | 1.4210 | | | | | | | |
| 174.000 | | | | | | | 1.1136 | | | | | | | | |
| 180.000 | 1.7293 | 1.0398 | .6566 | .5527 | .4940 | .4472 | | 1.4269 | | .0657 | -.0403 | .0090 | .0346 | .0190 | |
| 305.000 | | | .5355 | .2831 | .1805 | .1964 | | .3341 | | .2372 | | | | | |
| 320.000 | | | .4619 | .1450 | .1438 | .3760 | | .2415 | | .0548 | .2141 | .0563 | .0230 | -.0039 | .0532 |
| 340.000 | | | .4062 | .1272 | .1366 | .5181 | | .1402 | | .1281 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0682 | .1153 | .3858 | .3658 | -.0847 | -.1702 | -.1332 | | -.0805 | -.0865 |
| 40.000 | -.0087 | .1264 | .3123 | -.0042 | -.1448 | -.1469 | -.1374 | | -.0748 | -.1028 |
| 70.000 | .0102 | -.0078 | -.0200 | .0752 | .0597 | .0615 | .0441 | | | |
| 90.000 | .0135 | .0265 | .0065 | .1227 | .1049 | .0627 | .0222 | | | |
| 105.000 | | | .0424 | .1968 | .0573 | .0215 | -.0146 | | | |
| 110.000 | | | | | | | | -.0601 | | |
| 120.000 | .0262 | .0318 | .1570 | .1757 | .1712 | .0591 | -.0089 | -.0640 | | |
| 135.000 | | | .0540 | .2789 | .1757 | .0633 | .0531 | | | |
| 150.000 | .0457 | .0528 | .0498 | .2989 | .2206 | .1483 | .1426 | | | |
| 165.000 | .0535 | | .0531 | | .3820 | .2636 | -.0604 | | | |
| 180.000 | .0550 | .0585 | .0552 | .3904 | | | | | | |
| 320.000 | .0472 | .1979 | .4001 | .0286 | -.0826 | -.1392 | -.1521 | | | |

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

ARC97-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET830)

BETAO ( 1) = .215 ALPHAO( 2) = -4.330

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.6747 | .8090 | | .1378 | .1666 | .5787 | | .1050 | | .0466 | .2819 | .0402 | .0391 | -.0692 | -.0664 |
| 20.000 | | | | .1373 | .1718 | .3619 | | .1170 | | .0597 | | | | | |
| 40.000 | | | | .1458 | .1640 | .3404 | | .2505 | | .0000 | .1168 | .0480 | .0637 | -.0494 | .0083 |
| 55.000 | | | | .2824 | .1710 | .1466 | | .3382 | | .2175 | | | | | |
| 70.000 | | | | .3349 | .2339 | .1361 | | .1670 | | .2505 | .0853 | .0495 | .0397 | -.0156 | |
| 90.000 | | .7781 | | .3805 | .2700 | .1499 | | .1167 | | .0000 | .1138 | .0664 | .0137 | -.0120 | |
| 120.000 | | | | .4765 | .3347 | .2859 | | .3185 | | .2630 | .0601 | -.0879 | -.0281 | .0197 | |
| 140.000 | | | | | | | | | | .2241 | | | | | |
| 150.000 | | | .8119 | .4927 | .4118 | .3604 | | | | .1983 | -.0573 | -.0343 | -.0219 | .0071 | |
| 151.000 | | | | | | | | | .8638 | | | | | | |
| 158.000 | | | | | | | | 1.0130 | | | | | | | |
| 162.000 | | | | | | | | | 1.1740 | | | | | | |
| 165.000 | | | | | | | | | | .1315 | -.0558 | -.0174 | -.0008 | .0149 | |
| 169.000 | | | | | | | | 1.3083 | | | | | | | |
| 174.000 | | | | | | | 1.0173 | | | | | | | | |
| 180.000 | 1.6747 | .9593 | .5834 | .4927 | .4319 | .3903 | | 1.3149 | | .0514 | -.0561 | -.0159 | .0083 | .0086 | |
| 305.000 | | | .5104 | .2685 | .1660 | .3146 | | .3120 | | .2210 | | | | | |
| 320.000 | | | .4474 | .1329 | .1560 | .1971 | | .2656 | | .0433 | .2033 | .0326 | .0267 | -.0601 | .0307 |
| 340.000 | | | .3857 | .1173 | .1687 | .2632 | | .0971 | | .1440 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0457 | .0271 | .3494 | .3666 | -.1022 | -.0873 | -.1444 | | -.0746 | -.0784 |
| 40.000 | -.0186 | .1380 | .2948 | .2891 | -.1451 | -.1799 | -.1414 | | -.0746 | -.0969 |
| 70.000 | -.0204 | .1139 | -.0420 | .0076 | .0337 | -.1391 | .0083 | | | |
| 90.000 | -.0126 | -.0347 | -.0132 | .0581 | .0575 | .0176 | .0098 | | | |
| 105.000 | | | .0159 | .0848 | .0012 | .0483 | -.0338 | | | |
| 110.000 | | | | | | | | -.1149 | | |
| 120.000 | .0041 | .0124 | .1457 | .2020 | .1606 | .0557 | -.0144 | -.0701 | | |
| 135.000 | | | .1469 | .2065 | .1591 | .0610 | .0437 | | | |
| 150.000 | .0265 | .0346 | .0284 | .2518 | .1141 | .1040 | .1180 | | | |
| 165.000 | .0340 | | .0331 | | .3459 | .2235 | -.0734 | | | |
| 180.000 | .0340 | .0343 | .0343 | .3444 | | | | | | |
| 320.000 | .0367 | .1795 | .0337 | .0349 | .3501 | -.1319 | -.0794 | | | |

ARC37-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB30)

BETAO ( 1) = .182 ALPHAO( 3) = -.116

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5037 | .7429 | | .3589 | .4458 | .2198 | | .0317 | | .0370 | .2257 | .0233 | .0033 | -.0954 | -.0961 |
| 20.000 | | | | .1934 | .4121 | .0682 | | .0949 | | .0406 | | | | | |
| 40.000 | | | | .1960 | .3122 | .1834 | | .2507 | | .0000 | .0774 | .0218 | .0374 | -.0754 | -.0178 |
| 55.000 | | | | .2191 | .1946 | .2419 | | .2795 | | .1747 | | | | | |
| 70.000 | | | | .2596 | .1691 | .1324 | | .2088 | | .2043 | .0221 | .0060 | -.0011 | -.0405 | |
| 90.000 | | .6667 | | .3010 | .1975 | .1177 | | .1445 | | .0000 | .0649 | .0324 | -.0155 | -.0466 | |
| 120.000 | | | | .3758 | .2500 | .2094 | | .2314 | | .1956 | .0199 | -.0572 | -.0425 | -.0360 | |
| 140.000 | | | | | | | | | | .1761 | | | | | |
| 150.000 | | | .4965 | .3710 | .3055 | .2527 | | | | .1342 | -.0990 | -.0704 | -.0499 | -.0101 | |
| 151.000 | | | | | | | | | .7039 | | | | | | |
| 156.000 | | | | | | | | .7949 | | | | | | | |
| 162.000 | | | | | | | | | 1.0114 | | | | | | |
| 165.000 | | | | | | | | | | .0612 | -.0980 | -.0613 | -.0431 | -.0104 | |
| 169.000 | | | | | | | | 1.0767 | | | | | | | |
| 174.000 | | | | | | | .8230 | | | | | | | | |
| 180.000 | 1.5037 | .8006 | .4628 | .3651 | .3142 | .2784 | | 1.0993 | | -.0009 | -.0987 | -.0563 | -.0331 | -.0051 | |
| 305.000 | | | .4529 | .2472 | .3393 | .1801 | | .2410 | | .1690 | | | | | |
| 320.000 | | | .3920 | .3267 | .4432 | .0499 | | .2328 | | .0361 | .1264 | -.0143 | .0104 | -.0993 | -.0101 |
| 340.000 | | | .3199 | .3716 | .4629 | .0493 | | .0787 | | 1211 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0955 | .1499 | .2827 | .2253 | -.1114 | -.1784 | -.1209 | | -.0815 | -.0898 |
| 40.000 | -.0238 | .0975 | .2546 | .0595 | -.1437 | -.1354 | -.1381 | | -.1084 | -.0977 |
| 70.000 | -.0687 | -.0761 | -.0810 | .0057 | -.0763 | -.0267 | -.0362 | | | |
| 90.000 | -.0589 | -.0514 | -.0473 | .0456 | .0044 | -.0146 | -.0261 | | | |
| 105.000 | | | -.0062 | .0663 | -.0152 | -.0403 | -.0655 | | | |
| 110.000 | | | | | | | | -.0958 | | |
| 120.000 | -.0393 | -.0354 | .0509 | .1046 | .1318 | .0281 | -.0389 | -.0898 | | |
| 135.000 | | | .0849 | .1721 | .1330 | .0207 | .0112 | | | |
| 150.000 | -.0134 | -.0115 | -.0118 | .1964 | .0788 | .0562 | .0695 | | | |
| 165.000 | -.0062 | | -.0094 | | .2709 | .1531 | -.0869 | | | |
| 180.000 | -.0042 | -.0088 | -.0094 | .2560 | | | | | | |
| 320.000 | .0018 | .1570 | .3037 | .0835 | -.0886 | -.1239 | -.1663 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB30)

BETAO ( 1) = .188 ALPHAO( 4) = 4.056

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3062 | .6989 | | .4338 | .3235 | .1565 | | .0176 | | .0106 | .2033 | .0087 | .0027 | -.0991 | -.1025 |
| 20.000 | | | | .4625 | .3417 | .0594 | | .0661 | | .0740 | | | | | |
| 40.000 | | | | .4549 | .3638 | .0416 | | .2126 | | .0000 | .0278 | .0093 | -.0022 | -.0665 | -.0203 |
| 55.000 | | | | .3689 | .3373 | .1272 | | .2132 | | .1457 | | | | | |
| 70.000 | | | | .2931 | .2641 | .1675 | | .2027 | | .1489 | -.0113 | -.0248 | -.0316 | -.0636 | |
| 90.000 | | .5703 | | .2671 | .2100 | .1639 | | .1652 | | .0000 | .0192 | .0050 | -.0339 | -.0732 | |
| 120.000 | | | | .3042 | .1909 | .1610 | | .2108 | | .1765 | .0340 | -.0630 | -.0740 | -.0758 | |
| 140.000 | | | | | | | | | | .1488 | | | | | |
| 150.000 | | | .3839 | .2849 | .2250 | .1782 | | | | .0980 | -.1138 | -.0799 | -.0642 | -.0330 | |
| 151.000 | | | | | | | | | .5857 | | | | | | |
| 156.000 | | | | | | | | .6371 | | | | | | | |
| 162.000 | | | | | | | | | .8841 | | | | | | |
| 165.000 | | | | | | | | | | .0210 | -.1178 | -.0851 | -.0519 | -.0295 | |
| 169.000 | | | | | | | | .8710 | | | | | | | |
| 174.000 | | | | | | | .6057 | | | | | | | | |
| 180.000 | 1.3062 | .6520 | .3554 | .2773 | .2303 | .1948 | | .9135 | | -.0292 | -.1212 | -.0810 | -.0421 | -.0251 | |
| 305.000 | | | .4133 | .2457 | .2537 | .2987 | | .2071 | | .1331 | | | | | |
| 320.000 | | | .3648 | .3101 | .3841 | .2090 | | .2143 | | .0429 | .0503 | -.0121 | -.0139 | -.0791 | -.0165 |
| 340.000 | | | .3621 | .4078 | .3900 | .0866 | | .0690 | | .0752 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0270 | .1753 | .2989 | .2424 | -.0955 | -.1672 | -.1068 | | -.0763 | -.0807 |
| 40.000 | .0042 | .1221 | .3018 | .0862 | -.1294 | -.1188 | -.1394 | | -.1568 | -.1151 |
| 70.000 | -.0756 | -.0855 | -.0961 | -.0155 | -.0356 | -.0498 | -.0836 | | | |
| 90.000 | -.0753 | -.0490 | -.0417 | .0168 | -.0232 | -.0480 | -.0550 | | | |
| 105.000 | | | .0348 | .0483 | -.0250 | -.0504 | -.0801 | | | |
| 110.000 | | | | | | | | -.1098 | | |
| 120.000 | -.0700 | -.0426 | .0556 | .0420 | .0983 | .0093 | -.0550 | -.0990 | | |
| 135.000 | | | .0398 | .1175 | .0859 | -.0016 | -.0202 | | | |
| 150.000 | -.0481 | -.0461 | -.0487 | .1405 | .0505 | .0185 | .0350 | | | |
| 165.000 | -.0401 | | -.0438 | | .2177 | .1148 | -.0954 | | | |
| 180.000 | -.0378 | -.0426 | -.0444 | .1994 | | | | | | |
| 320.000 | .0497 | .1795 | .3586 | .1186 | -.0840 | -.0[illegible] | -.1305 | | | |

ARC97-019 IA81 LVAR(ALLHL SEALED) ORB. FUSELAGE (RETB30)

BETAO ( 1) = .209 ALPHAO( 5) = 8.267

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2204 | .8485 | | .4322 | .0597 | .0763 | | .0120 | | -.0451 | .1651 | -.0303 | -.0287 | -.1094 | .0798 |
| 20.000 | | | | .4618 | .0679 | .0628 | | .0477 | | -.0130 | | | | | |
| 40.000 | | | | .5281 | .2749 | -.0048 | | .1779 | | .0000 | -.0646 | -.0327 | -.0391 | -.0119 | -.0050 |
| 55.000 | | | | .4048 | .3167 | .1418 | | .1699 | | .1331 | | | | | |
| 70.000 | | | | .3369 | .2746 | .1787 | | .1643 | | .1035 | -.0416 | -.0646 | -.0683 | -.0761 | |
| 90.000 | | .5361 | | .3022 | .2350 | .1524 | | .1872 | | .0000 | .0162 | -.0169 | -.0631 | -.0994 | |
| 120.000 | | | | .2787 | .1728 | .1377 | | .1890 | | .1954 | .0212 | -.0781 | -.1036 | -.1094 | |
| 140.000 | | | | | | | | | | .1440 | | | | | |
| 150.000 | | | .3076 | .2150 | .1640 | .1439 | | | | .0582 | -.1227 | -.1001 | -.0845 | -.0633 | |
| 151.000 | | | | | | | | | .5100 | | | | | | |
| 155.000 | | | | | | | | .5305 | | | | | | | |
| 162.000 | | | | | | | | | .7092 | | | | | | |
| 165.000 | | | | | | | | | | -.0027 | -.1328 | -.0920 | -.0651 | -.0588 | |
| 169.000 | | | | | | | | .3772 | | | | | | | |
| 174.000 | | | | | | | .4492 | | | | | | | | |
| 180.000 | 1.2204 | .5397 | .2624 | .1999 | .1575 | .1598 | | .7327 | | -.0529 | -.1322 | -.0888 | -.0547 | -.0553 | |
| 305.000 | | | .4824 | .3720 | .3890 | .1471 | | .1829 | | .1247 | | | | | |
| 320.000 | | | .6008 | .4676 | .4111 | .0554 | | .1585 | | -.0244 | .0230 | -.0594 | -.0400 | -.0335 | -.0017 |
| 340.000 | | | .6482 | .4598 | .1221 | .0230 | | -.0350 | | .0524 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8730 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1184 | .2314 | .3510 | .2909 | -.0785 | -.1613 | -.0977 | | -.0603 | -.0699 |
| 40.000 | .0392 | .1840 | .3665 | .1210 | -.1095 | -.1298 | -.1403 | | -.1398 | -.1160 |
| 70.000 | -.0724 | -.0935 | -.1037 | -.0990 | -.0429 | -.0632 | -.0789 | | | |
| 90.000 | -.0724 | -.0594 | -.0794 | -.0073 | -.0057 | -.0318 | -.0654 | | | |
| 105.000 | | | -.0507 | .0635 | .0181 | -.0535 | -.0907 | | | |
| 110.000 | | | | | | | | -.1230 | | |
| 120.000 | -.0721 | -.0471 | .0296 | .0842 | .0466 | -.0298 | -.0674 | -.1033 | | |
| 135.000 | | | .0299 | .0531 | .0422 | -.0097 | -.0237 | | | |
| 150.000 | -.0821 | -.0630 | -.0184 | .1459 | -.0148 | .0230 | .0057 | | | |
| 165.000 | -.0744 | | -.0603 | | .2099 | .0900 | -.1065 | | | |
| 180.000 | -.0697 | -.0691 | -.0644 | .1701 | | | | | | |
| 320.000 | .0836 | .2241 | -.113 | .14 | -.0847 | -.1171 | -.1233 | | | |

ARC97-019 !A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB30)

BETAO ( 1) = .218 ALPHAO( 8) = 10.355

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.1648 | 1.0570 | | .2593 | -.0219 | .0846 | | -.0373 | | -.0422 | .1307 | -.0436 | -.0516 | -.1064 | .0467 |
| 20.000 | | | | .3558 | -.0038 | .0179 | | .0725 | | -.0175 | | | | | |
| 40.000 | | | | .5495 | .1333 | .0787 | | .0656 | | .0000 | -.0641 | -.0522 | -.0412 | -.0354 | -.0039 |
| 55.000 | | | | .5122 | .2928 | .0976 | | .1794 | | .0925 | | | | | |
| 70.000 | | | | .3119 | .2753 | .1395 | | .1500 | | .0991 | -.0644 | -.0916 | -.0842 | -.0751 | |
| 90.000 | | .5416 | | .2972 | .2339 | .1448 | | .1598 | | .0000 | -.0255 | -.0406 | -.0775 | -.0897 | |
| 120.000 | | | | .2564 | .1554 | .1218 | | .1684 | | .1604 | .0050 | -.0744 | -.1194 | -.1280 | |
| 140.000 | | | | | | | | | | .1427 | | | | | |
| 150.000 | | | .2843 | .1913 | .1410 | .1159 | | | | .0543 | -.1292 | -.1145 | -.0899 | -.0772 | |
| 151.000 | | | | | | | | | .4675 | | | | | | |
| 156.000 | | | | | | | | .4684 | | | | | | | |
| 162.000 | | | | | | | | | .6435 | | | | | | |
| 165.000 | | | | | | | | | | -.0176 | -.1394 | -.1000 | -.0723 | -.075. | |
| 169.000 | | | | | | | | .5938 | | | | | | | |
| 174.000 | | | | | | | 3771 | | | | | | | | |
| 180.000 | 1.1648 | .4880 | .2362 | .1703 | .1342 | .1250 | | .6533 | | -.0556 | -.1384 | -.0889 | -.0656 | -.0698 | |
| 305.000 | | | .5484 | .4241 | .3349 | .2124 | | .2040 | | .0842 | | | | | |
| 320.000 | | | .7817 | .4355 | .2410 | .1209 | | .0662 | | -.0571 | -.0096 | -.0787 | -.0451 | -.0216 | -.0298 |
| 340.000 | | | .7578 | .2190 | .0604 | .0943 | | -.0709 | | .0124 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1090 | .2226 | .3143 | .2534 | -.0844 | -.1604 | -.0974 | | -.0569 | -.0669 |
| 40.000 | .0187 | .1735 | .3374 | .1001 | -.1059 | -.1349 | -.1446 | | -.1215 | -.0919 |
| 70.000 | -.0681 | -.0929 | -.1089 | -.1032 | -.0545 | -.0707 | -.0942 | | | |
| 90.000 | -.0710 | -.0640 | -.0883 | -.0465 | -.0184 | -.0533 | -.0722 | | | |
| 105.000 | | | -.0573 | .0472 | .0141 | -.0557 | -.0942 | | | |
| 110.000 | | | | | | | | -.1247 | | |
| 120.000 | -.0851 | -.0643 | .0309 | .0699 | .0546 | -.0279 | -.0763 | -.1121 | | |
| 135.000 | | | .0360 | .0540 | .0241 | -.0417 | -.0493 | | | |
| 150.000 | -.0857 | -.0681 | -.0242 | .1474 | .0247 | .0254 | .0008 | | | |
| 165.000 | -.0854 | | -.0611 | | .1752 | .0533 | -.0874 | | | |
| 180.000 | -.0869 | -.0757 | -.0629 | .1711 | | | | | | |
| 320.000 | .0781 | .1987 | .4307 | .1299 | -.0753 | -.1235 | -.1276 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET831) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.200 RN/FT = 3.000
ELV-IB = .000 ELV-OB = .000
RUDDER = .000 SPDBRK = 55.000

BETAO ( 1) = -.117 ALPHAO( 1) = -6.403

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.6168 | .8577 | | .1644 | .5213 | .5553 | | .0709 | | .0470 | .2692 | .0080 | .0206 | -.0344 | .0670 |
| 20.000 | | | | .1659 | .3439 | .5241 | | .0936 | | .0710 | | | | | |
| 40.000 | | | | .1900 | .2333 | .3651 | | .2261 | | .0000 | .0921 | .0359 | .0506 | .1000 | .0277 |
| 50.000 | | | | .2720 | .2148 | .3254 | | .3691 | | .2258 | | | | | |
| 70.000 | | | | .3453 | .2175 | .2060 | | .3956 | | .2959 | .0764 | .0409 | .0412 | .0049 | |
| 90.000 | | .8103 | | .4161 | .2882 | .1793 | | .3084 | | .0000 | .1163 | .0469 | -.0009 | .0130 | |
| 120.000 | | | | .5316 | .3909 | .3353 | | .4427 | | .2929 | .0547 | -.0572 | .0076 | .0311 | |
| 140.000 | | | | | | | | | | .2259 | | | | | |
| 150.000 | | | .6843 | .5548 | .4939 | .4174 | | | | .1764 | -.0502 | -.0263 | .0263 | .0421 | |
| 161.000 | | | | | | | | | .9495 | | | | | | |
| 166.000 | | | | | | | | 1.1010 | | | | | | | |
| 162.000 | | | | | | | | | 1.1431 | | | | | | |
| 165.000 | | | | | | | | | | .1403 | -.0667 | .0068 | .0287 | .0529 | |
| 169.000 | | | | | | | | 1.3587 | | | | | | | |
| 174.000 | | | | | | | 1.0829 | | | | | | | | |
| 180.000 | 1.6168 | .9970 | .6429 | .5507 | .5012 | .4519 | | 1.3656 | | .0157 | -.0499 | -.0073 | .0292 | .0579 | |
| 305.000 | | | .4988 | .2197 | .2173 | .3237 | | .3152 | | .1922 | | | | | |
| 320.000 | | | .3854 | .1484 | .2187 | .3116 | | .1759 | | -.0114 | .2050 | .0276 | -.0030 | .0357 | .0108 |
| 340.000 | | | .3292 | .1699 | .4956 | .5440 | | .0811 | | .0909 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9930 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0551 | .1368 | .4309 | .4320 | -.1453 | -.2297 | -.1519 | | -.0992 | -.0994 |
| 40.000 | -.0219 | .1024 | .3374 | -.0572 | -.2022 | -.1876 | -.1801 | | -.0909 | -.0952 |
| 70.000 | .0479 | -.0033 | -.0177 | .0934 | .0660 | .0481 | .0189 | | | |
| 90.000 | .0515 | .0426 | -.0015 | .1510 | .0677 | .0365 | .0137 | | | |
| 105.000 | | | .034 | .1811 | .0269 | -.0220 | -.0469 | | | |
| 110.000 | | | | | | | | -.0823 | | |
| 120.000 | .0166 | .0493 | .1135 | .2175 | .1854 | .0402 | -.0344 | -.0866 | | |
| 135.000 | | | .1543 | .3125 | .1941 | .0751 | .0571 | | | |
| 150.000 | .0396 | .0278 | .0514 | .3034 | .2024 | .1917 | .1527 | | | |
| 165.000 | .0467 | | .0256 | | .3086 | .0774 | -.0720 | | | |
| 180.000 | .0410 | .0321 | .0258 | .3999 | | | | | | |
| 320.000 | .0360 | .2042 | .3867 | .3880 | -.1857 | -.1375 | -.1228 | | | |

ARC97-019 IAB1 LVAP(ALL HL SEALED) ORB. FUSELAGE (RETB31)

BETAO ( 1) = -.139 ALPHAO( 2) = -4.308

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5735 | .8332 | | .1988 | .6250 | .4811 | | .0687 | | .0337 | .2498 | -.0086 | .0132 | -.0821 | .0490 |
| 20.000 | | | | .2038 | .6253 | .4706 | | .0947 | | .0588 | | | | | |
| 40.000 | | | | .1772 | .2482 | .3030 | | .2223 | | .0000 | .0938 | .0068 | .0425 | .0978 | .0077 |
| 55.000 | | | | .2471 | .2574 | .3437 | | .3469 | | .2104 | | | | | |
| 70.000 | | | | .3167 | .2162 | .2085 | | .3558 | | .2692 | .0467 | .0225 | .0299 | -.0118 | |
| 90.000 | | .7684 | | .3928 | .2591 | .1857 | | .3396 | | .0000 | .0972 | .0393 | -.0094 | -.0045 | |
| 120.000 | | | | .4957 | .3508 | .2934 | | .3963 | | .2724 | .0992 | -.0596 | -.0096 | .0159 | |
| 140.000 | | | | | | | | | | .2111 | | | | | |
| 150.000 | | | .6226 | .4953 | .4271 | .3649 | | | | .1509 | -.0794 | -.0267 | .0092 | .0191 | |
| 151.000 | | | | | | | | | .8767 | | | | | | |
| 156.000 | | | | | | | | 1.0091 | | | | | | | |
| 162.000 | | | | | | | | | 1.0918 | | | | | | |
| 165.000 | | | | | | | | | | .1098 | -.0888 | -.0104 | .0221 | .0266 | |
| 169.000 | | | | | | | | 1.2710 | | | | | | | |
| 174.000 | | | | | | | 1.0135 | | | | | | | | |
| 180.000 | 1.5735 | .9284 | .5740 | .4926 | .4418 | .3942 | | 1.2982 | | -.0058 | -.0771 | -.0222 | .0258 | .0307 | |
| 305.000 | | | .4739 | .1965 | .2359 | .2525 | | .2909 | | .1074 | | | | | |
| 320.000 | | | .3631 | .1884 | .4813 | .2248 | | .1748 | | -.0026 | .1928 | .0096 | -.0053 | .0266 | -.0017 |
| 340.000 | | | .3050 | .1927 | .5783 | .4233 | | .0809 | | .0932 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0183 | .1715 | .4134 | .3804 | -.1467 | -.2290 | -.1475 | | -.0901 | -.1083 |
| 40.000 | -.0391 | .1310 | .2952 | -.0425 | -.1997 | -.1299 | -.1812 | | -.0992 | -.1143 |
| 70.000 | .0160 | -.0324 | -.0425 | .0752 | .0401 | .0202 | -.0081 | | | |
| 90.000 | .0180 | .0130 | -.0223 | .1184 | .0426 | .0111 | -.0062 | | | |
| 105.000 | | | .0125 | .1509 | .0105 | -.0422 | -.0651 | | | |
| 110.000 | | | | | | | | -.1016 | | |
| 120.000 | -.0089 | .0249 | .0928 | .1833 | .1659 | .0243 | -.0532 | -.1079 | | |
| 135.000 | | | .1385 | .2669 | .1681 | .0422 | .0315 | | | |
| 150.000 | .0119 | .0076 | .0512 | .2616 | .1725 | .1418 | .1224 | | | |
| 165.000 | .0169 | | .0057 | | .3439 | .2350 | -.0800 | | | |
| 180.000 | .0152 | .0125 | .0048 | .3458 | | | | | | |
| 320.000 | .0202 | .2073 | .3075 | .1400 | -.1321 | -.1417 | -.2022 | | | |

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

AR097-019 1A81 LVAP(ALLHL SEALED) ORB FUSELAGE (RET831)

BETAO ( 1) = -.174 ALPHAO( 3) = -.147

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0090 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4150 | .7731 | | .4632 | .4073 | .2557 | | .0514 | | -.0303 | .2067 | -.0225 | -.0284 | -.1219 | .0190 |
| 20.000 | | | | .4714 | .5138 | .4412 | | .0675 | | .0084 | | | | | |
| 40.000 | | | | .3542 | .5508 | .1509 | | .1925 | | .0000 | .0570 | -.0190 | .0150 | .0506 | -.0355 |
| 55.000 | | | | .2880 | .4640 | .2433 | | .2593 | | .1442 | | | | | |
| 70.000 | | | | .2685 | .2822 | .2912 | | .2432 | | .1832 | -.0013 | -.0193 | -.0192 | -.0572 | |
| 90.000 | | .6734 | | .3209 | .2091 | .2171 | | .2918 | | .0000 | .0399 | .0026 | -.0456 | -.0578 | |
| 120.000 | | | | .4027 | .2704 | .2218 | | .3425 | | .3238 | .0713 | -.0933 | -.0583 | -.0359 | |
| 140.000 | | | | | | | | | | .2247 | | | | | |
| 150.000 | | | .5177 | .3931 | .3223 | .2701 | | | | .1161 | -.0976 | -.0648 | -.0421 | -.0230 | |
| 154.000 | | | | | | | | | .7454 | | | | | | |
| 156.000 | | | | | | | | .8225 | | | | | | | |
| 162.000 | | | | | | | | | .9833 | | | | | | |
| 165.000 | | | | | | | | | | .0541 | -.1234 | -.0408 | -.0216 | -.0169 | |
| 169.000 | | | | | | | | 1.0971 | | | | | | | |
| 174.000 | | | | | | | .8567 | | | | | | | | |
| 180.000 | 1.4150 | .7888 | .4701 | .3827 | .3326 | .2935 | | 1.1164 | | -.0416 | -.1208 | -.0580 | -.0341 | -.0144 | |
| 305.000 | | | .4185 | .3756 | .3931 | .1413 | | .2348 | | .1199 | | | | | |
| 320.000 | | | .4073 | .4194 | .4184 | .1499 | | .1284 | | .0054 | .1547 | -.0413 | -.0354 | -.0183 | -.0233 |
| 340.000 | | | .3789 | .4259 | .3928 | .2302 | | .0435 | | .0544 | | | | | |

| X/LB | .6520 | .7290 | .7780 | .8210 | .8790 | .9210 | .9600 | .9890 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| 000 | -.0169 | .2083 | .3572 | .2579 | -.1309 | -.2122 | -.1284 | | -.0776 | -.1049 |
| 40.000 | -.0421 | .1403 | .2612 | -.0065 | -.1882 | -.1232 | -.1659 | | -.1007 | -.1115 |
| 70.000 | -.0330 | -.0705 | -.0798 | .0171 | -.0052 | -.0237 | -.0430 | | | |
| 90.000 | -.0252 | -.0258 | -.0591 | .0590 | .0022 | -.0259 | -.0397 | | | |
| 105.000 | | | -.0005 | .1032 | -.0146 | -.0617 | -.0872 | | | |
| 110.000 | | | | | | | | -.1223 | | |
| 120.000 | -.0465 | -.0113 | .1244 | .1342 | .1417 | .0072 | -.0671 | -.1228 | | |
| 135.000 | | | .1166 | .1898 | .1362 | .0155 | -.0098 | | | |
| 150.000 | -.0311 | -.0310 | -.0153 | .1941 | .0499 | .0779 | .0815 | | | |
| 165.000 | -.0269 | | -.0371 | | .2752 | .1548 | -.1057 | | | |
| 180.000 | -.0261 | -.0291 | -.0371 | .2784 | | | | | | |
| 320.000 | .0293 | .2059 | .3506 | .1398 | -.1201 | -.1452 | -.2098 | | | |

ARC97-019 !A81 LVAP(ALL ML SEALED) ORB. FUSELAGE (RET83!)

BETAO ( 1) = -.167 ALPHAO( 4) = 4.050

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/L | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3760 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2723 | .8884 | | .5365 | .0793 | .1035 | | -.0058 | | .0596 | 1589 | -.0283 | -.0573 | -.0678 | .0395 |
| 20.000 | | | | .5596 | .1325 | .1055 | | -.0168 | | .0184 | | | | | |
| 40.000 | | | | .5341 | .2801 | .1648 | | .1892 | | .0000 | -.0166 | -.0306 | -.0440 | -.0000 | -.0359 |
| 55.000 | | | | .4309 | .3377 | .2479 | | .1922 | | .1193 | | | | | |
| 70.000 | | | | .3629 | .3056 | .2058 | | .1922 | | .1185 | -.0143 | -.0523 | -.0589 | -.0791 | |
| 90.000 | | .6135 | | .3297 | .2531 | .2075 | | .2301 | | .0000 | -.0088 | -.0249 | -.0539 | -.0947 | |
| 120.000 | | | | .3374 | .2225 | .1980 | | .3158 | | .2542 | .0381 | -.1031 | -.1069 | -.0845 | |
| 140.000 | | | | | | | | | | .2219 | | | | | |
| 150.000 | | | .4114 | .2990 | .2387 | .1994 | | | | .0951 | -.1247 | -.1033 | -.0815 | -.0631 | |
| 151.000 | | | | | | | | | .6506 | | | | | | |
| 155.000 | | | | | | | | .6727 | | | | | | | |
| 162.000 | | | | | | | | | .8481 | | | | | | |
| 165.000 | | | | | | | | | | .0161 | -.1439 | -.0612 | -.0556 | -.0564 | |
| 169.000 | | | | | | | | .8810 | | | | | | | |
| 174.000 | | | | | | | .6684 | | | | | | | | |
| 180.000 | 1.2723 | .6524 | .3392 | .2845 | .2429 | .2069 | | .9298 | | -.0684 | -.1448 | -.0780 | -.0411 | -.0534 | |
| 315.000 | | | .5367 | .3854 | .2610 | .1707 | | .1933 | | .0939 | | | | | |
| 320.000 | | | .6497 | .4965 | .1966 | .1442 | | .1095 | | - 0500 | .0968 | -.0637 | -.0405 | -.0423 | -.0420 |
| 340.000 | | | .5918 | .4959 | .0753 | .1018 | | -.0152 | | .0516 | | | | | |

| X/L | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0974 | .2203 | .2636 | .2987 | -.1582 | -.1709 | -.1157 | | -.0769 | -.1064 |
| 40.000 | .0115 | .1914 | .2909 | .0755 | -.1734 | -.1599 | -.1616 | | -.1523 | -.1064 |
| 70.000 | -.0623 | -.0983 | -.1109 | -.0228 | -.0436 | -.0621 | -.0759 | | | |
| 90.000 | -.0498 | -.0573 | -.0834 | .0296 | -.0289 | -.0529 | -.0797 | | | |
| 105.000 | | | .0017 | .0510 | -.0314 | -.0983 | -.1099 | | | |
| 110.000 | | | | | | | | -.1428 | | |
| 120.000 | -.0537 | -.0363 | .0830 | .0909 | .0804 | -.0251 | -.0866 | -.1323 | | |
| 135.000 | | | .0828 | .1199 | .0851 | -.0092 | -.0388 | | | |
| 150.000 | -.0711 | -.0525 | .0466 | .1506 | .0357 | .0519 | .0367 | | | |
| 165.000 | -.0672 | | -.0544 | | .2334 | .1218 | -.0949 | | | |
| 180.000 | -.0672 | -.0663 | -.0305 | .2284 | | | | | | |
| 320.000 | .0808 | .1915 | .4707 | .1180 | -.1024 | -.1370 | -.1878 | | | |

ARC97-010 1A81 (VARIABLE SEALED) ORB. FUSELAGE (RET831)

BETAO ( 11 = -.139 ALPHAO( 5) = 8.292

SECTION ( 11ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.1935 | 1.1660 | | .2331 | -.0475 | .1090 | | -.0085 | | .0513 | .1139 | -.0507 | -.0719 | .0382 | .0649 |
| 20.000 | | | | .3469 | -.0022 | .0785 | | .0003 | | .0164 | | | | | |
| 40.000 | | | | .5383 | .1558 | .1048 | | .0917 | | .0000 | -.0584 | -.0650 | -.0547 | .0372 | .0599 |
| 55.000 | | | | .5128 | .3258 | .1954 | | .1495 | | .0792 | | | | | |
| 70.000 | | | | .3573 | .3052 | .2456 | | .1463 | | .0939 | -.0767 | -.1002 | -.0940 | -.0552 | |
| 90.000 | | .5979 | | .3488 | .2674 | .1955 | | .1648 | | .0000 | -.0339 | -.0507 | -.0943 | -.0973 | |
| 120.000 | | | | .3052 | .1931 | .1640 | | .2039 | | .1912 | -.0006 | -.1093 | -.1420 | -.1199 | |
| 140.000 | | | | | | | | | | .1926 | | | | | |
| 150.000 | | | .3487 | .2367 | .1813 | .1579 | | | | .0750 | -.1622 | -.1350 | -.1389 | -.1011 | |
| 151.000 | | | | | | | | | .5624 | | | | | | |
| 156.000 | | | | | | | | .5711 | | | | | | | |
| 162.000 | | | | | | | | | .7165 | | | | | | |
| 165.000 | | | | | | | | | | -.0123 | -.1594 | -.1113 | -.0830 | -.0919 | |
| 169.000 | | | | | | | | .6966 | | | | | | | |
| 174.000 | | | | | | | .4991 | | | | | | | | |
| 180.000 | 1.1835 | .5421 | .2030 | .2197 | .1755 | .1682 | | .7433 | | -.0899 | -.1571 | -.0889 | -.0738 | -.0870 | |
| 305.000 | | | .5537 | .3801 | 2606 | .2174 | | .1564 | | .0507 | | | | | |
| 320.000 | | | .7696 | .3539 | 1160 | .0769 | | .0830 | | -.0818 | .0275 | -.0970 | -.0528 | -.0504 | .0105 |
| 340.000 | | | .7838 | .2328 | -.0515 | .1749 | | -.0728 | | .0212 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8310 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1533 | .2711 | .3895 | .3338 | -.1361 | -.1877 | -.1175 | | -.0750 | -.0932 |
| 40.000 | .0347 | .2176 | .3482 | .1370 | -.1516 | -.1734 | -.2016 | | -.1760 | -.1398 |
| 70.000 | -.0748 | -.1159 | -.1295 | -.1212 | -.0635 | -.0792 | -.0098 | | | |
| 90.000 | -.0628 | -.0742 | -.1030 | -.0443 | -.0251 | -.0665 | -.0962 | | | |
| 105.000 | | | -.0895 | .0511 | -.0019 | -.0953 | -.1220 | | | |
| 110.000 | | | | | | | | -.1571 | | |
| 120.000 | -.0911 | -.0943 | .0337 | .0609 | .0591 | .0501 | -.0990 | -.1438 | | |
| 135.000 | | | .0477 | .0764 | .0540 | -.0619 | -.0797 | | | |
| 150.000 | -.0789 | -.0735 | .0557 | .0690 | .0699 | .0398 | .0028 | | | |
| 165.000 | -.0870 | | .0183 | | .1963 | .0780 | -.1092 | | | |
| 180.000 | -.0978 | -.0798 | -.0556 | .2728 | | | | | | |
| 320.000 | .0649 | .2707 | .5851 | .2571 | -.0740 | -.1607 | -.1834 | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET831)

BETAO ( 1) = -.118 ALPHAO( 6) = 10.383

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.1500 | 1.2456 | | .1334 | .0447 | .1825 | | .0211 | | .0434 | .0770 | -.0693 | -.0917 | .0856 | .0813 |
| 20.000 | | | | .1430 | .0455 | .0712 | | .0206 | | -.0002 | | | | | |
| 40.000 | | | | .3192 | .0631 | .1534 | | .0114 | | .0000 | -.0862 | -.0777 | -.0446 | .0455 | .0791 |
| 55.000 | | | | .4416 | .2577 | .2203 | | .1627 | | .0499 | | | | | |
| 70.000 | | | | .3944 | .2901 | .2214 | | .1467 | | .0746 | -.1057 | -.1263 | -.0958 | -.0494 | |
| 90.000 | | .5710 | | .3513 | .2892 | .2228 | | .1670 | | .0000 | -.0805 | -.0782 | -.1070 | -.0744 | |
| 120.000 | | | | .2747 | .1543 | .1299 | | .1594 | | .1747 | -.0089 | -.1148 | -.1643 | -.1355 | |
| 140.000 | | | | | | | | | | .1635 | | | | | |
| 150.000 | | | .3224 | .2121 | .1554 | .1266 | | | | .0985 | -.1599 | -.1422 | -.1110 | -.1165 | |
| 151.000 | | | | | | | | | .4896 | | | | | | |
| 155.000 | | | | | | | | .4855 | | | | | | | |
| 162.000 | | | | | | | | | .6460 | | | | | | |
| 165.000 | | | | | | | | | | -.0350 | -.1662 | -.1175 | -.0925 | -.1070 | |
| 169.000 | | | | | | | | .6107 | | | | | | | |
| 174.000 | | | | | | | .4704 | | | | | | | | |
| 180.000 | 1.1500 | .4812 | .2525 | .1946 | .1551 | .1227 | | .6728 | | -.1029 | -.1662 | -.0925 | -.0833 | -.1026 | |
| 305.000 | | | .6550 | .3933 | .3025 | .2161 | | .1648 | | .0255 | | | | | |
| 320.000 | | | .6829 | .3019 | .1501 | .1982 | | .0412 | | -.1135 | -.0018 | -.1056 | -.0583 | -.0295 | .0311 |
| 340.000 | | | .6825 | .1721 | -.0071 | .2239 | | -.1078 | | .0429 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1351 | .2683 | .3454 | .2773 | -.1397 | -.1638 | -.1167 | | -.0729 | -.0892 |
| 40.000 | .0444 | .2330 | .3382 | .1102 | -.1605 | -.1760 | -.1897 | | -.1549 | -.0965 |
| 70.000 | -.0754 | -.1203 | -.1355 | -.1289 | -.0801 | -.0989 | -.1081 | | | |
| 90.000 | -.0740 | -.0834 | -.1107 | -.0751 | -.0364 | -.0770 | -.1059 | | | |
| 105.000 | | | -.1007 | .0352 | -.0084 | -.0953 | -.1299 | | | |
| 110.000 | | | | | | | | -.1634 | | |
| 120.000 | -.1151 | -.1079 | .0090 | .0350 | .0353 | -.0613 | -.1075 | -.1446 | | |
| 135.000 | | | .0211 | .0618 | .0239 | -.0577 | -.0898 | | | |
| 150.000 | -.0896 | -.0837 | .0316 | .0391 | .0554 | .0189 | -.0129 | | | |
| 165.000 | -.0920 | | .0131 | | .1680 | .0502 | -.1119 | | | |
| 180.000 | -.0993 | -.0660 | -.0486 | .2285 | | | | | | |
| 320.000 | .0536 | .3131 | .4598 | .2465 | -.0781 | -.1684 | -.1723 | | | |

SP037-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET932) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.000 RN/FT = 3.000
ELV-IB = .000 ELV-OB = .000
RUDDER = .000 SPDBRK = 55.000

BETAO ( 1) = .079 ALPHAO( 1) = -6.373

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5530 | .8521 | | .4632 | .4335 | .6270 | | .0623 | | -.0096 | .2405 | -.0425 | -.0268 | .0845 | .0120 |
| 20.000 | | | | .3413 | .4690 | .5269 | | .0816 | | .0062 | | | | | |
| 40.000 | | | | .3355 | .5235 | .5074 | | .1615 | | .0000 | .0561 | .0227 | .0154 | .0560 | .0253 |
| 55.000 | | | | .3023 | .5346 | .3513 | | .3304 | | .1125 | | | | | |
| 70.000 | | | | .3189 | .3039 | .4000 | | .3696 | | .2690 | .0279 | -.0017 | .0091 | -.0097 | |
| 90.000 | | .7067 | | .3990 | .2654 | .2745 | | .3533 | | .0000 | .0815 | -.0022 | -.0341 | -.0007 | |
| 120.000 | | | | .5312 | .1375 | .3234 | | .6159 | | .3888 | .0835 | -.1006 | -.0155 | .0143 | |
| 140.000 | | | | | | | | | | .2177 | | | | | |
| 150.000 | | | .7060 | .5733 | .4899 | .4225 | | | | .1389 | -.0560 | -.0004 | .0254 | .0197 | |
| 151.000 | | | | | | | | | .9206 | | | | | | |
| 155.000 | | | | | | | | 1.2131 | | | | | | | |
| 162.000 | | | | | | | | | 1.0419 | | | | | | |
| 165.000 | | | | | | | | | | .1153 | -.0854 | .0234 | .0525 | .0310 | |
| 169.000 | | | | | | | | 1.2207 | | | | | | | |
| 174.000 | | | | | | | 1.0021 | | | | | | | | |
| 180.000 | 1.5530 | 1.0014 | .6683 | .5717 | .5124 | .4627 | | 1.2959 | | -.0195 | -.0508 | .0231 | .0519 | .0342 | |
| 305.000 | | | .4749 | .3057 | .5173 | .3931 | | .2772 | | .1479 | | | | | |
| 320.000 | | | .3318 | .3249 | .5012 | .5266 | | .1151 | | .0216 | .1849 | .0076 | -.0224 | -.0060 | -.0030 |
| 340.000 | | | .2657 | .4774 | .4324 | .4843 | | .0500 | | .0513 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9500 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0087 | .1846 | .3977 | .3663 | -.1634 | -.1658 | -.1726 | | -.1183 | -.1231 |
| 40.000 | -.0619 | .1142 | .3344 | -.0587 | -.2215 | -.1327 | -.2079 | | -.1247 | -.1140 |
| 70.000 | .0500 | -.0223 | -.0241 | .1215 | .0770 | .0511 | .0263 | | | |
| 90.000 | .0534 | .0256 | -.0099 | .1559 | .0597 | .0397 | .0204 | | | |
| 105.000 | | | .0371 | .1771 | .0144 | -.0475 | -.0576 | | | |
| 110.000 | | | | | | | | -.0877 | | |
| 120.000 | .0251 | .0531 | .1137 | .2017 | .1823 | .0172 | -.0634 | -.1232 | | |
| 135.000 | | | .1617 | .3252 | .1772 | .0788 | .0663 | | | |
| 150.000 | .0109 | .0182 | .1018 | .3310 | .1677 | .1848 | .1477 | | | |
| 165.000 | .0130 | | .0315 | | .4160 | .2018 | -.1009 | | | |
| 190.000 | .0138 | .0126 | .0249 | .4181 | | | | | | |
| 320.000 | -.0167 | .1004 | .3593 | .0878 | -.1533 | -.1533 | -.2103 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB32)

BETAO ( 1) = .053 ALPHAO( 2) = -4.277

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5204 | .8307 | | .6940 | .3658 | .4974 | | .0493 | | -.0378 | .2172 | -.0656 | -.0458 | .0525 | .0058 |
| 20.000 | | | | .7160 | .3955 | .4411 | | .0574 | | -.0251 | | | | | |
| 40.000 | | | | .5015 | .4517 | .4556 | | .1413 | | .0000 | .0419 | -.0163 | -.0095 | .0428 | .0299 |
| 55.000 | | | | .3573 | .4975 | .3035 | | .2953 | | .1418 | | | | | |
| 70.000 | | | | .2991 | .3671 | .3624 | | .3195 | | .2210 | .0024 | -.0251 | -.0142 | -.0440 | |
| 90.000 | | .7562 | | .3885 | .2593 | .2902 | | .3104 | | .0000 | .0427 | -.0193 | -.0523 | -.0310 | |
| 120.000 | | | | .4850 | .3446 | .3007 | | .5840 | | .3512 | .0593 | -.1092 | -.0465 | -.0092 | |
| 140.000 | | | | | | | | | | .2420 | | | | | |
| 150.000 | | | .6423 | .5094 | .4303 | .3572 | | | | .1200 | -.0829 | -.0313 | -.0007 | -.0057 | |
| 151.000 | | | | | | | | | .9016 | | | | | | |
| 156.000 | | | | | | | | 1.1793 | | | | | | | |
| 162.000 | | | | | | | | | 1.0056 | | | | | | |
| 165.000 | | | | | | | | | | .0922 | -.1085 | -.0035 | .0209 | .0050 | |
| 169.000 | | | | | | | | 1.1727 | | | | | | | |
| 174.000 | | | | | | | .9321 | | | | | | | | |
| 180.000 | 1.5204 | .9321 | .5994 | .5075 | .4529 | .4025 | | 1.2099 | | -.0400 | -.0746 | .0040 | .0296 | .0069 | |
| 305.000 | | | .4488 | .4358 | .4815 | .3369 | | .2413 | | .1192 | | | | | |
| 320.000 | | | .3099 | .5354 | .4507 | .4413 | | .0909 | | .0080 | .1539 | -.0214 | -.0486 | -.0134 | -.0172 |
| 340.000 | | | .2506 | .6207 | .3923 | .3697 | | .0376 | | .0309 | | | | | |

| X/LB | .6520 | .7240 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0158 | .2398 | .3752 | .3321 | -.1667 | -.1678 | -.1671 | | -.1098 | -.1199 |
| 40.000 | -.0707 | .1435 | .2959 | -.0339 | -.2192 | -.1244 | -.2128 | | -.1202 | -.1119 |
| 70.000 | .0184 | -.0474 | -.0543 | .0591 | .0482 | .0229 | -.0011 | | | |
| 90.000 | .0261 | .0018 | -.0386 | .1269 | .0335 | .0154 | -.0029 | | | |
| 105.000 | | | .0000 | .1466 | -.0038 | -.0650 | -.0772 | | | |
| 110.000 | | | | | | | | -.1077 | | |
| 120.000 | -.0054 | .0279 | .0846 | .1736 | .1611 | -.0003 | -.0775 | -.1355 | | |
| 135.000 | | | .1381 | .2844 | .1518 | .0551 | .0305 | | | |
| 150.000 | -.0148 | -.0085 | .0976 | .2886 | .1422 | .1435 | .1168 | | | |
| 165.000 | -.0113 | | .0085 | | .3595 | .2240 | -.1144 | | | |
| 180.000 | -.0097 | -.0133 | .0074 | .3621 | | | | | | |
| 320.000 | -.0394 | .1128 | .3904 | .0933 | -.1689 | -.1585 | -.2272 | | | |

ARC97-019 IA8I LVAP(ALLHL SEALED) ORB. FUSELAGE (RET832)

BETAO ( 1) = .011 ALPHAO( 3) = -.098

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4083 | .9480 | | .4770 | .1523 | .3189 | | -.0280 | | -.0180 | .1472 | -.0595 | -.0823 | .0028 | .0048 |
| 20.000 | | | | .4994 | .1862 | .3525 | | -.0117 | | -.0240 | | | | | |
| 40.000 | | | | .5257 | .3429 | .2187 | | .1438 | | .0000 | .0323 | -.0463 | -.0363 | .0269 | .0099 |
| 55.000 | | | | .4695 | .4033 | .2417 | | .2523 | | .1089 | | | | | |
| 70.000 | | | | .4035 | .3551 | .2921 | | .2434 | | .1645 | -.0336 | -.0582 | -.0510 | -.0978 | |
| 90.000 | | .6771 | | .3760 | .3211 | .2952 | | .2450 | | .0000 | .0044 | -.0394 | -.0844 | -.0821 | |
| 120.000 | | | | .4189 | .2935 | .2818 | | .4892 | | .2942 | .0259 | -.1269 | -.0379 | -.0430 | |
| 140.000 | | | | | | | | | | .2503 | | | | | |
| 150.000 | | | .5368 | .4099 | .3422 | .2895 | | | | .1015 | -.1282 | -.0904 | -.0477 | -.0517 | |
| 151.000 | | | | | | | | | .8099 | | | | | | |
| 156.000 | | | | | | | | .8765 | | | | | | | |
| 162.000 | | | | | | | | | .9597 | | | | | | |
| 165.000 | | | | | | | | | | .0409 | -.1434 | -.0490 | -.0270 | -.0431 | |
| 169.000 | | | | | | | | 1.0857 | | | | | | | |
| 174.000 | | | | | | | .8409 | | | | | | | | |
| 180.000 | 1.4083 | .7933 | .4917 | .4057 | .3557 | .3056 | | 1.1286 | | -.0797 | -.1227 | -.0339 | -.0171 | -.0434 | |
| 305.000 | | | .6261 | .4473 | .3027 | .2824 | | .1912 | | .0933 | | | | | |
| 320.000 | | | .6975 | .4852 | .1879 | .3357 | | .0790 | | -.0463 | .1191 | -.0779 | -.0578 | -.0418 | -.0426 |
| 340.000 | | | .7009 | .4571 | .1871 | .2447 | | .0006 | | .0403 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0405 | .2107 | .3685 | .3003 | -.1697 | -.1525 | -.1477 | | -.0990 | -.1052 |
| 40.000 | -.0708 | .1628 | .2696 | .0208 | -.2140 | -.1087 | -.2024 | | -.0949 | -.0961 |
| 70.000 | -.0370 | -.0979 | -.0965 | .0171 | -.0039 | -.0202 | -.0456 | | | |
| 90.000 | -.0257 | -.0412 | -.0710 | .0653 | -.0039 | -.0325 | -.0432 | | | |
| 105.000 | | | -.0343 | .1149 | -.0325 | -.0856 | -.1069 | | | |
| 110.000 | | | | | | | | -.1364 | | |
| 120.000 | -.0445 | -.0135 | .0999 | .1312 | .1336 | -.0175 | -.0964 | -.1455 | | |
| 135.000 | | | .1068 | .2135 | .1192 | .0050 | -.0213 | | | |
| 150.000 | -.0632 | -.0463 | .0736 | .2186 | .0848 | .0342 | .0752 | | | |
| 165.000 | -.0579 | | -.0058 | | .2781 | .1673 | -.1263 | | | |
| 180.000 | -.0573 | -.0567 | .0019 | .2845 | | | | | | |
| 320.000 | -.0134 | .1796 | .3987 | .1432 | -.1444 | -.1634 | -.2363 | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET832)

BETAO ( 1) = .020 ALPHAO( 4) = 4.129

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3144 | 1.1309 | | .3420 | .0761 | .1727 | | -.0203 | | .0968 | .1200 | -.0733 | -.1013 | .0470 | .0507 |
| 20.000 | | | | .3935 | .0769 | .1502 | | -.0498 | | .0503 | | | | | |
| 40.000 | | | | .4860 | .1780 | .2025 | | .1042 | | .0000 | -.0002 | -.0576 | -.0516 | .0547 | .0496 |
| 55.000 | | | | .4730 | .3331 | .2076 | | .1892 | | .0759 | | | | | |
| 70.000 | | | | .3975 | .3259 | .2366 | | .1728 | | .0991 | -.0656 | -.0832 | -.0792 | -.0707 | |
| 90.000 | | .6405 | | .3961 | .2900 | .2464 | | .1837 | | .0000 | -.0299 | -.0557 | -.1000 | -.0887 | |
| 120.000 | | | | .3584 | .2453 | .2266 | | .3693 | | .2347 | -.0007 | -.1392 | -.1328 | -.0840 | |
| 140.000 | | | | | | | | | | .2130 | | | | | |
| 150.000 | | | .4432 | .3280 | .2583 | .2255 | | | | .0733 | -.1539 | -.1276 | -.0825 | -.0909 | |
| 151.000 | | | | | | | | | .6888 | | | | | | |
| 156.000 | | | | | | | | .7597 | | | | | | | |
| 162.000 | | | | | | | | | .8317 | | | | | | |
| 165.000 | | | | | | | | | | .0026 | -.1668 | -.0908 | -.0535 | -.0826 | |
| 169.000 | | | | | | | | .9233 | | | | | | | |
| 174.000 | | | | | | | .7231 | | | | | | | | |
| 180.000 | 1.3144 | .6458 | .3860 | .3188 | .2629 | .2335 | | .9420 | | -.1003 | -.1522 | -.0684 | -.0555 | -.0810 | |
| 305.000 | | | .5993 | .3840 | .2927 | .2832 | | .1596 | | .0814 | | | | | |
| 320.000 | | | .7678 | .4046 | .1217 | .2824 | | .0667 | | -.0942 | .0694 | -.0939 | -.0416 | -.0384 | -.0170 |
| 340.000 | | | .8135 | .3320 | .0423 | .2247 | | -.0757 | | .0579 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1681 | .2618 | .3726 | .3447 | -.1611 | -.1252 | -.1660 | | -.0944 | -.1082 |
| 40.000 | -.0119 | .2166 | .3364 | .1174 | -.1947 | -.1300 | -.2055 | | -.1300 | -.1242 |
| 70.000 | -.3670 | -.1152 | -.1253 | -.0522 | -.0277 | -.0544 | -.0787 | | | |
| 90.000 | -.0529 | -.0657 | -.0974 | .0544 | -.0056 | -.0719 | -.1029 | | | |
| 105.000 | | | .0095 | .0955 | -.0251 | -.0927 | -.1239 | | | |
| 110.000 | | | | | | | | -.1607 | | |
| 120.000 | -.0601 | -.0445 | .0961 | .0937 | .0631 | -.0459 | -.1012 | -.1399 | | |
| 135.000 | | | .0932 | .1342 | .0921 | -.0109 | -.0347 | | | |
| 150.000 | -.0759 | -.0562 | .0717 | .1819 | .0719 | .0622 | .0283 | | | |
| 165.000 | -.0815 | | -.0179 | | .2460 | .1188 | -.1145 | | | |
| 180.000 | -.0990 | -.0647 | -.0373 | .2663 | | | | | | |
| 320.000 | .0253 | .2673 | .4599 | .2138 | -.1390 | -.1417 | -.1959 | | | |

AP097-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB32)

BETAO ( 1) = .053 ALPHAO( 5) = 8.392

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2911 | 1.3619 | | .1548 | .0621 | .3950 | | .0040 | | .0169 | .0757 | -.0985 | -.1052 | .1128 | .1411 |
| 20.000 | | | | .2446 | .0255 | .1615 | | -.0393 | | .0048 | | | | | |
| 40.000 | | | | .4167 | .1223 | .2209 | | .0309 | | .0000 | -.0611 | -.0999 | -.0481 | .0528 | .1285 |
| 55.000 | | | | .4906 | .2965 | .1930 | | .1512 | | .0235 | | | | | |
| 70.000 | | | | .4127 | . 29 | .2079 | | .1313 | | .0579 | -.1221 | -.1299 | -.1098 | -.0571 | |
| 90.000 | | .6022 | | .3573 | .2805 | .2193 | | .1504 | | .0000 | -.0729 | -.0859 | -.1270 | -.0833 | |
| 120.000 | | | | .3182 | .2117 | .1981 | | .2737 | | .1866 | -.0286 | -.1425 | -.1744 | -.1113 | |
| 140.000 | | | | | | | | | | .1786 | | | | | |
| 150.000 | | | .3680 | .2533 | .2036 | .1721 | | | | .0413 | -.1669 | -.1553 | -.1098 | -.1295 | |
| 151.000 | | | | | | | | | .5844 | | | | | | |
| 156.000 | | | | | | | | .6209 | | | | | | | |
| 162.000 | | | | | | | | | .7144 | | | | | | |
| 165.000 | | | | | | | | | | -.0407 | -.1960 | -.1211 | -.0951 | -.1199 | |
| 169.000 | | | | | | | | .7761 | | | | | | | |
| 174.000 | | | | | | | .6204 | | | | | | | | |
| 180.000 | 1.2911 | .5279 | .3010 | .2430 | .2003 | .1735 | | .8151 | | -.1290 | -.1788 | -.0944 | -.0998 | -.1151 | |
| 305.000 | | | .6756 | .3763 | .3527 | .2385 | | .1274 | | .0192 | | | | | |
| 320.000 | | | .7472 | .2913 | .2019 | .2803 | | .0209 | | -.1420 | -.0227 | -.1016 | -.0586 | .0059 | .0573 |
| 340.000 | | | .7271 | .1459 | -.0031 | .4276 | | -.1749 | | .0149 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1901 | .3512 | .4457 | .3911 | -.1433 | -.1486 | -.1528 | | -.0765 | -.0959 |
| 40.000 | .0846 | .3185 | .4465 | .1916 | -.1990 | -.2088 | -.2009 | | -.1439 | -.0992 |
| 70.000 | -.0859 | -.1376 | -.1495 | -.1397 | -.0567 | -.0834 | -.1124 | | | |
| 90.000 | -.0590 | -.0910 | -.1219 | .0051 | -.0299 | -.0762 | -.1156 | | | |
| 105.000 | | | -.0979 | .0609 | -.0181 | -.1095 | -.1458 | | | |
| 110.000 | | | | | | | | -.1814 | | |
| 120.000 | -.1057 | -.0873 | .0476 | .0791 | .0511 | -.0637 | -.1172 | -.1597 | | |
| 135.000 | | | .0508 | .1017 | .0511 | -.0579 | -.0694 | | | |
| 150.000 | -.0870 | -.0535 | .0593 | .0921 | .0337 | .0397 | -.0038 | | | |
| 165.000 | -.0975 | | .0567 | | .1345 | .0696 | -.1226 | | | |
| 180.000 | -.0958 | -.0594 | .0537 | .2531 | | | | | | |
| 320.000 | .0287 | .4109 | .5736 | .2909 | -.1244 | -.1715 | -.2055 | | | |

ARC97-019 !AB! LVAP(ALLHL SEALED) ORB. FUSELAGE (RET832)

BETAO ( 1) = .074 ALPHAO( 6) = 10.494

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4178 | 1.1957 | | .1128 | .0740 | .3568 | | -.0100 | | -.0249 | .0440 | -.1022 | -.1000 | .0830 | .1183 |
| 20.000 | | | | .1538 | .0579 | .1628 | | -.0200 | | -.0642 | | | | | |
| 40.000 | | | | .3150 | .0735 | .2223 | | .0555 | | .0000 | -.1036 | -.0667 | -.0402 | .0516 | .1357 |
| 55.000 | | | | .4176 | .3031 | .2052 | | .1322 | | .0081 | | | | | |
| 70.000 | | | | .4218 | .2855 | .2071 | | .1283 | | .0416 | -.1449 | -.1526 | -.0871 | -.2495 | |
| 90.000 | | .6755 | | .4025 | .2658 | .2033 | | .1403 | | .0000 | -.0890 | -.1069 | -.1306 | -.0830 | |
| 120.000 | | | | .3036 | .1545 | .1672 | | .1582 | | .1755 | -.0392 | -.1525 | -.1997 | -.1306 | |
| 140.000 | | | | | | | | | | .1541 | | | | | |
| 150.000 | | | .3398 | .2282 | .1783 | .1523 | | | | .0302 | -.1944 | -.1724 | -.1281 | -.1404 | |
| 151.000 | | | | | | | | | .5697 | | | | | | |
| 155.000 | | | | | | | | .6176 | | | | | | | |
| 162.000 | | | | | | | | | .6634 | | | | | | |
| 165.000 | | | | | | | | | | -.0565 | -.1933 | -.1371 | -.1111 | -.1350 | |
| 169.000 | | | | | | | | .7077 | | | | | | | |
| 174.000 | | | | | | | .5535 | | | | | | | | |
| 180.000 | 1.4179 | .4562 | .2621 | .2227 | .1794 | .1520 | | .7670 | | -.1439 | -.1886 | -.1075 | -.1051 | -.1313 | |
| 305.000 | | | .6912 | .4996 | .2163 | .2399 | | .1000 | | .0040 | | | | | |
| 320.000 | | | .7109 | .3700 | .0394 | .3655 | | -.0019 | | -.1644 | -.0037 | -.1180 | -.0675 | .0397 | .0849 |
| 340.000 | | | .6529 | .1483 | -.0393 | .3921 | | -.1627 | | -.0057 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| 000 | .2101 | .3642 | .4330 | .3833 | -.1378 | -.1237 | -.1625 | | -.0787 | -.0885 |
| 40.000 | .1681 | .3256 | .4428 | .1756 | -.1937 | -.1754 | -.1817 | | -.0931 | -.0904 |
| 70.000 | -.0920 | -.1425 | -.1451 | -.1515 | -.0732 | -.0974 | -.1197 | | | |
| 90.000 | -.0751 | -.0976 | -.1241 | -.0192 | -.0460 | -.0910 | -.1232 | | | |
| 105.000 | | | -.0832 | .0443 | -.0282 | -.1131 | -.1491 | | | |
| 110.000 | | | | | | | | -.1833 | | |
| 120.000 | -.1281 | -.0874 | .0401 | .0599 | .0322 | -.0722 | -.1149 | -.1569 | | |
| 135.000 | | | .0313 | .0801 | .0407 | -.0623 | -.0754 | | | |
| 150.000 | -.0962 | -.0309 | .0379 | .0894 | .0804 | .0234 | -.0151 | | | |
| 165.000 | -.0890 | | .0350 | | .1762 | .0594 | -.1267 | | | |
| 180.000 | -.0995 | -.0540 | .0462 | .2707 | | | | | | |
| 320.000 | .0464 | .3907 | .4681 | .2550 | -.1288 | -.1715 | -.1924 | | | |

ORIGINAL PAGE IS OF POOR QUALITY

APC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET833) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.550 RN/FT = 3.000
ELV-IB = .000 ELV-OB = .000
RUDDER = .000 SPOBRK = 55.000

BETAO ( 1) = .428 ALPHAO( 1) = -6.390

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4572 | 1.0151 | | .3203 | .3149 | .9785 | | -.0762 | | -.2489 | .0546 | .0055 | .0772 | .0111 | -.1713 |
| 20.000 | | | | .3554 | .3058 | .7548 | | -.0893 | | -.2070 | | | | | |
| 40.000 | | | | .3999 | .3281 | .5342 | | -.0654 | | .0003 | -.0306 | .0022 | .1209 | -.1083 | -.0329 |
| 55.000 | | | | .4722 | .3921 | .4165 | | .1846 | | .0555 | | | | | |
| 70.000 | | | | .4872 | .3916 | .3832 | | .2899 | | .1446 | -.1737 | -.1777 | -.0748 | .0197 | |
| 90.000 | | .8356 | | .5146 | .3970 | .3498 | | .3840 | | .0003 | -.1463 | -.1696 | -.1443 | .0207 | |
| 120.000 | | | | .5777 | .4617 | .4412 | | .5033 | | .1779 | -.0788 | -.2784 | -.1216 | -.0390 | |
| 140.000 | | | | | | | | | | .0516 | | | | | |
| 150.000 | | | .7355 | .6105 | .5258 | .5227 | | | | -.0565 | -.1971 | -.0856 | -.0603 | -.0709 | |
| 151.000 | | | | | | | | | .7446 | | | | | | |
| 156.000 | | | | | | | | 1.0116 | | | | | | | |
| 162.000 | | | | | | | | | .8154 | | | | | | |
| 165.000 | | | | | | | | | | -.0495 | -.1729 | -.0493 | -.0317 | -.0536 | |
| 169.000 | | | | | | | | 1.1060 | | | | | | | |
| 174.000 | | | | | | | 1.1837 | | | | | | | | |
| 180.000 | 1.4572 | .9512 | .7097 | .6187 | .5611 | .5423 | | 1.0945 | | -.1847 | -.1925 | -.0055 | -.0251 | -.0496 | |
| 305.000 | | | .7056 | .4609 | .4116 | .4172 | | .1178 | | .0533 | | | | | |
| 330.000 | | | .6614 | .3509 | .3391 | .5464 | | -.1046 | | -.1140 | .0405 | -.0322 | .0172 | .0333 | -.0898 |
| 340.000 | | | .6327 | .3040 | .3204 | .7697 | | -.1470 | | -.1078 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0460 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0037 | .2033 | .3883 | .2837 | -.1659 | -.1905 | -.1793 | | -.1504 | -.1373 |
| 40.000 | -.0202 | .1353 | .2559 | -.0583 | -.2014 | -.1983 | -.2289 | | -.1399 | -.1467 |
| 70.000 | .0302 | -.0636 | .0017 | .1502 | .0379 | .0765 | .0119 | | | |
| 90.000 | .0362 | -.0210 | .1396 | .1630 | .0389 | .0282 | .0014 | | | |
| 105.000 | | | .2197 | .1253 | -.1604 | -.0854 | -.0557 | | | |
| 110.000 | | | | | | | | -.1365 | | |
| 120.000 | .0063 | .0320 | .2712 | .1603 | .0605 | -.0919 | -.1725 | -.1976 | | |
| 140.000 | | | .3360 | .3799 | .1227 | .0552 | .0164 | | | |
| 150.000 | -.0013 | .0263 | .3423 | .4075 | .1972 | .1491 | .0725 | | | |
| 165.000 | -.0034 | | .3342 | | .4245 | .2310 | -.1391 | | | |
| 180.000 | -.0013 | .0210 | .3363 | .5040 | | | | | | |
| [illegible] | -.0011 | .1941 | .3750 | .0997 | -.2243 | -.1572 | -.2033 | | | |

ARC97-019 (A81 LVAPIALLHL SEALED) ORB. FUSELAGE (RETB33)

BETAO ( 1) = .401 ALPHAO( 2) = -4.271

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4165 | 1.1275 | | .2393 | .0878 | .9724 | | -.1883 | | -.2131 | .0511 | -.0542 | .0842 | .0212 | -.1591 |
| 2.000 | | | | .2681 | .1202 | .7186 | | -.2613 | | -.1400 | | | | | |
| 40.000 | | | | .3435 | .2077 | .5026 | | -.0806 | | .0000 | -.0234 | -.0127 | .1088 | -.1050 | -.0291 |
| 55.000 | | | | .4352 | .3295 | .3242 | | .1427 | | .0403 | | | | | |
| 70.000 | | | | .4523 | .3427 | .2443 | | .2467 | | .1264 | -.1788 | -.1798 | -.1118 | -.0162 | |
| 90.000 | | .8100 | | .4780 | .3528 | .2742 | | .3413 | | .0000 | -.1576 | -.1798 | -.1718 | -.0057 | |
| 120.000 | | | | .5347 | .4177 | .3925 | | .5713 | | .1636 | -.0981 | -.2869 | -.1449 | -.0262 | |
| 140.000 | | | | | | | | | | .0540 | | | | | |
| 150.000 | | | .6812 | .5547 | .4751 | .4402 | | | | -.0759 | -.2235 | -.1178 | -.0797 | -.0971 | |
| 151.000 | | | | | | | | | .7130 | | | | | | |
| 156.000 | | | | | | | | .9786 | | | | | | | |
| 162.000 | | | | | | | | | .7853 | | | | | | |
| 165.000 | | | | | | | | | | -.0739 | -.2040 | -.0847 | -.0609 | -.0829 | |
| 169.000 | | | | | | | | 1.0722 | | | | | | | |
| 174.000 | | | | | | | 1.1363 | | | | | | | | |
| 180.000 | 1.4165 | .8747 | .6491 | .5609 | .5060 | .4623 | | 1.0593 | | -.2107 | -.2174 | -.0410 | -.0536 | -.0797 | |
| 305.000 | | | .6975 | .4231 | .3722 | .3828 | | .0937 | | .0294 | | | | | |
| 320.000 | | | .6765 | .3062 | .2422 | .5243 | | -.1107 | | -.2557 | .0243 | -.0832 | .0212 | .0258 | -.0863 |
| 340.000 | | | .6454 | .2295 | .1439 | .7518 | | -.3109 | | -.0915 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9930 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0487 | .2097 | .3736 | .2899 | -.1770 | -.1898 | -.1678 | | -.1361 | -.1285 |
| 40.000 | -.0283 | .1456 | .2656 | -.0181 | -.2068 | -.2269 | -.2422 | | -.1293 | -.1397 |
| 70.000 | .0109 | -.0925 | -.0416 | .1055 | .0562 | .0048 | -.0197 | | | |
| 90.000 | .0195 | -.0506 | .1026 | .1214 | .0037 | -.0007 | -.0297 | | | |
| 105.000 | | | .1897 | .1185 | -.0856 | -.0300 | -.0937 | | | |
| 110.000 | | | | | | | | -.1578 | | |
| 120.000 | -.0070 | .0126 | .2314 | .1233 | .0525 | -.1041 | -.1835 | -.2014 | | |
| 135.000 | | | .2998 | .3348 | .0993 | .0212 | -.0011 | | | |
| 150.000 | -.0285 | .0142 | .3066 | .3617 | .1727 | .1176 | .0511 | | | |
| 165.000 | -.0301 | | .3076 | | .3936 | .2007 | -.1366 | | | |
| 180.000 | -.0283 | .0032 | .3081 | .4560 | | | | | | |
| 320.000 | .0001 | .2101 | .4049 | .1405 | -.2237 | -.1581 | -.1993 | | | |

AR097-019 (A81 LVAPIALLML SEALED) ORB. FUSELAGE (RETB33)

BETA0 ( 1) = .348 ALPHA0( 31 = -.036

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0090 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4792 | 1.1377 | | .1641 | .0726 | .9420 | | -.1956 | | -.2024 | .0050 | -.0989 | .0088 | .0645 | .0292 |
| 20.000 | | | | .2039 | .0530 | .6219 | | -.2653 | | -.1753 | | | | | |
| 40.000 | | | | .2980 | .1454 | .4346 | | -.1178 | | .0000 | -.0678 | -.0435 | .0695 | -.0922 | -.0377 |
| 55.000 | | | | .4000 | .2930 | .2241 | | .0848 | | -.0442 | | | | | |
| 70.000 | | | | .4168 | .3143 | .1845 | | .1545 | | .0789 | -.2057 | -.2132 | -.1524 | -.0665 | |
| 90.000 | | .7743 | | .4425 | .3220 | .2209 | | .2393 | | .0000 | -.1697 | -.2031 | -.1971 | -.0470 | |
| 120.000 | | | | .4619 | .3499 | .3084 | | .5045 | | .1404 | -.1311 | -.3041 | -.1918 | -.0733 | |
| 140.000 | | | | | | | | | | .0993 | | | | | |
| 150.000 | | | .5823 | .4593 | .3929 | .3469 | | | | -.1032 | -.2719 | -.1765 | -.1309 | -.1401 | |
| 151.000 | | | | | | | | | .6799 | | | | | | |
| 156.000 | | | | | | | | .9168 | | | | | | | |
| 162.000 | | | | | | | | | .7425 | | | | | | |
| 165.000 | | | | | | | | | | -.1195 | -.2569 | -.1471 | -.1183 | -.1354 | |
| 169.000 | | | | | | | | 1.0284 | | | | | | | |
| 174.000 | | | | | | | .9864 | | | | | | | | |
| 180.000 | 1.4792 | .7355 | .5360 | .4640 | .4203 | .3636 | | 1.0074 | | -.2545 | -.2642 | -.1029 | -.1120 | -.1327 | |
| 305.000 | | | .6676 | .4013 | .3560 | .3395 | | .0468 | | -.0551 | | | | | |
| 320.000 | | | .6551 | .2759 | .2185 | .4931 | | -.1327 | | -.2808 | -.0315 | -.1306 | -.0169 | .0421 | -.0096 |
| 340.000 | | | .6258 | .1695 | .0752 | .7407 | | -.3605 | | -.1112 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9890 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1032 | .2589 | .3850 | .2885 | -.1784 | -.1852 | -.1595 | | -.1253 | -.1206 |
| 40.000 | .0744 | .2169 | .3284 | .0884 | -.2418 | -.2590 | -.2932 | | -.1107 | -.1227 |
| 70.000 | -.0246 | -.1295 | -.1173 | .0395 | .0042 | -.0788 | -.0616 | | | |
| 90.000 | -.0099 | -.0813 | .0422 | .0813 | -.0501 | -.0456 | -.0711 | | | |
| 105.000 | | | .1272 | .0816 | -.1138 | -.1402 | -.1195 | | | |
| 110.000 | | | | | | | | -.1909 | | |
| 120.000 | -.0354 | -.0205 | .2073 | .1409 | .0560 | -.1133 | -.1844 | -.1870 | | |
| 135.000 | | | .2170 | .2507 | .0869 | -.0129 | -.0420 | | | |
| 150.000 | -.0577 | -.0098 | .2449 | .2899 | .0994 | .0584 | .0100 | | | |
| 165.000 | -.0592 | | .2659 | | .3204 | .1479 | -.1319 | | | |
| 180.000 | -.0613 | -.0194 | .2593 | .3789 | | | | | | |
| 320.000 | .0221 | .2877 | .4492 | .2005 | -.2293 | -.1857 | -.2392 | | | |

ARC97-019 IA41 LVAP(ALLML SEALED) ORB. FUSELAGE (RET833)

BETAO ( 1) = .366 ALPHAO( 4) = 4.233

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0090 | 0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4724 | 1.1560 | | .1085 | .0393 | .9223 | | -.1791 | | -.1832 | .0176 | -.1210 | -.0513 | .0905 | .1006 |
| 20.000 | | | | .1497 | .0126 | .6087 | | -.2896 | | -.1691 | | | | | |
| 40.000 | | | | .2725 | .1253 | .4016 | | -.1333 | | .0000 | -.1252 | -.0570 | .0076 | .0011 | .0097 |
| 55.000 | | | | .3847 | .2850 | .1967 | | .0500 | | -.0840 | | | | | |
| 70.000 | | | | .3946 | .2922 | .1441 | | .1029 | | -.0097 | -.1921 | -.1771 | -.1650 | -.1074 | |
| 90.000 | | .7409 | | .4029 | .2873 | .1761 | | .1380 | | .0000 | -.1916 | -.1880 | -.2028 | -.0953 | |
| 120.000 | | | | .3930 | .2721 | .2420 | | .4640 | | .1176 | -.1507 | -.3090 | -.2209 | -.1284 | |
| 140.000 | | | | | | | | | | .0433 | | | | | |
| 150.000 | | | .4901 | .3687 | .3019 | .2662 | | | | -.1351 | -.3095 | -.2293 | -.1720 | -.1575 | |
| 151.000 | | | | | | | | | .6155 | | | | | | |
| 156.000 | | | | | | | | .8621 | | | | | | | |
| 162.000 | | | | | | | | | .6622 | | | | | | |
| 165.000 | | | | | | | | | | -.1608 | -.2986 | -.1955 | -.1695 | -.1488 | |
| 169.000 | | | | | | | | .9302 | | | | | | | |
| 174.000 | | | | | | | .9713 | | | | | | | | |
| 180.000 | 1.4724 | .5938 | .4417 | .3780 | .3238 | .2779 | | .9072 | | -.2876 | -.2983 | -.1534 | -.1642 | -.1444 | |
| 305.000 | | | .6755 | .4034 | .3555 | .2942 | | .0066 | | -.0885 | | | | | |
| 320.000 | | | .6651 | .2674 | .2092 | .4434 | | -.1507 | | -.2823 | .0007 | -.1767 | -.0317 | .1181 | .0843 |
| 340.000 | | | .6146 | .1303 | .0746 | .7096 | | -.3844 | | -.1271 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .2103 | .3647 | .4711 | .3619 | -.1283 | -.1549 | -.1418 | | -.1107 | -.1073 |
| 40.000 | .1912 | .3141 | .4175 | .1216 | -.2290 | -.1953 | -.2345 | | -.1007 | -.1141 |
| 70.000 | -.0425 | -.1517 | -.1667 | -.0494 | -.0459 | -.0644 | -.1088 | | | |
| 90.000 | -.0275 | -.1001 | -.1183 | .0640 | -.0587 | -.1140 | -.1334 | | | |
| 105.000 | | | .0316 | .1190 | -.0975 | -.1906 | -.2004 | | | |
| 110.000 | | | | | | | | -.1941 | | |
| 120.000 | -.0621 | -.0400 | .1563 | .1575 | -.0097 | -.1308 | -.1837 | -.1826 | | |
| 135.000 | | | .1740 | .2141 | .0508 | -.0470 | -.0802 | | | |
| 150.000 | -.0619 | .0546 | .1690 | .2255 | .1270 | .0319 | -.0395 | | | |
| 165.000 | -.0624 | | .1836 | | .2302 | .0981 | -.1321 | | | |
| 180.000 | -.0655 | .0064 | .2047 | .2970 | | | | | | |
| 320.000 | .2012 | .3724 | .4912 | .2412 | -.2162 | -.1522 | -.1918 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RE1833)

BETAO ( 1) = .403 ALPHAO( 5) = 8.510

SECTION ( 11)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0010 | .0090 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4602 | 1.1198 | | .0342 | .0071 | .0933 | | -.1195 | | -.1887 | -.0372 | -.1814 | .1455 | .1050 | .1809 |
| 20.000 | | | | .0686 | -.0284 | .5956 | | -.2916 | | -.1796 | | | | | |
| 40.000 | | | | .2090 | .0942 | .3432 | | -.1322 | | .0000 | -.2095 | -.0971 | .0183 | .0548 | .0139 |
| 55.000 | | | | .3696 | .2856 | .1750 | | .0522 | | -.0824 | | | | | |
| 70.000 | | | | .3717 | .2776 | .1232 | | .0745 | | -.0331 | -.2079 | -.2197 | -.1405 | -.0786 | |
| 90.000 | | .7127 | | .3722 | .2546 | .1424 | | .0952 | | .0000 | -.1860 | -.2197 | -.2312 | -.0998 | |
| 120.000 | | | | .3391 | .2097 | .1803 | | .3895 | | .1122 | -.1638 | -.3118 | -.2998 | -.1240 | |
| 140.000 | | | | | | | | | | .038 | | | | | |
| 150.000 | | | .4024 | .2918 | .2289 | .1953 | | | | -.1704 | -.3535 | -.2739 | -.2054 | -.1611 | |
| 151.000 | | | | | | | | | .6112 | | | | | | |
| 156.000 | | | | | | | | .8515 | | | | | | | |
| 162.000 | | | | | | | | | .6389 | | | | | | |
| 165.000 | | | | | | | | | | -.2060 | -.3393 | -.2354 | -.1982 | -.1813 | |
| 169.000 | | | | | | | | .9316 | | | | | | | |
| 174.000 | | | | | | | .8524 | | | | | | | | |
| 180.000 | 1.4602 | .5200 | .3321 | .3045 | .2468 | .2012 | | .0822 | | -.3324 | -.3372 | -.1982 | -.1939 | -.1795 | |
| 335.000 | | | .6920 | .3611 | .3111 | .2565 | | -.0059 | | -.0768 | | | | | |
| 320.000 | | | .6873 | .2015 | .1205 | .0095 | | -.1459 | | -.2605 | -.0294 | -.2144 | -.0116 | .1394 | .2112 |
| 340.000 | | | .5522 | .0371 | .0015 | .6375 | | -.3885 | | -.1346 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .2843 | .4221 | .5190 | .4024 | -.1351 | -.1628 | -.1502 | | -.1085 | -.1072 |
| 40.000 | .2542 | .3631 | .4623 | .1488 | -.2559 | -.1659 | -.1934 | | -.1020 | -.1035 |
| 70.000 | -.0715 | .1745 | -.2078 | -.0921 | -.1153 | -.1176 | -.1542 | | | |
| 90.000 | -.0553 | -.1373 | -.1698 | .0199 | -.1043 | -.1628 | -.1774 | | | |
| 105.000 | | | .0076 | .0798 | -.1223 | -.2099 | -.2303 | | | |
| 110.000 | | | | | | | | -.2290 | | |
| 120.000 | -.1250 | -.0726 | .1087 | .1122 | -.0023 | -.1471 | -.2033 | -.1950 | | |
| 135.000 | | | .1597 | .1391 | .0332 | -.0027 | -.1136 | | | |
| 150.000 | -.0445 | .0193 | .1571 | .2403 | .0675 | -.0041 | -.0505 | | | |
| 165.000 | -.0390 | | .1691 | | .2282 | .0579 | -.1547 | | | |
| 180.000 | -.0341 | .0084 | .1753 | .3543 | | | | | | |
| 320.000 | .2479 | .4126 | .4810 | .2143 | -.1709 | -.1785 | -.1892 | | | |

AF-97-019 (A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB34) ( 04 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.550 RN/FT = 2.500
ELV-IB = 8.000 ELV-OB = -4.000
RUDDER = .000 SPDBRK = .000

BETAO ( 1) = .403 ALPHAO( 1) = -6.292

SECTION ' 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1860 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4660 | 1.0336 | .5752 | .2700 | .2923 | 1.0759 | | -.0779 | | -.2630 | .0337 | -.0055 | .0673 | .0041 | -.1707 |
| 20.000 | | | .5867 | .3135 | .3064 | .7541 | | -.1175 | | -.2103 | | | | | |
| 40.000 | | | .6675 | .3761 | .3029 | .5331 | | -.0748 | | -.1869 | .0000 | .0000 | .0973 | -.1342 | -.0379 |
| 55.000 | | | .7099 | .4598 | .3773 | .3982 | | .1745 | | .0488 | | | | | |
| 70.000 | | | .7085 | .4742 | .3818 | .3465 | | .2783 | | .0000 | -.1893 | -.1926 | -.0930 | .0002 | |
| 90.000 | | .0440 | .7280 | .5111 | .3853 | .3346 | | .3580 | | .0000 | -.1585 | -.1968 | -.1752 | .0002 | |
| 120.000 | | | .7411 | .5753 | .4531 | .4451 | | .5919 | | .1666 | -.0924 | -.3073 | -.1469 | -.0294 | |
| 140.000 | | | | | | | | | | .0493 | | | | | |
| 150.000 | | | .7376 | .6048 | .5174 | .5135 | | | | -.0674 | -.2085 | -.1094 | -.0733 | -.0743 | |
| 151.000 | | | | | | | | | .7418 | | | | | | |
| 156.000 | | | | | | | | 1.0070 | | | | | | | |
| 162.000 | | | | | | | | | .8107 | | | | | | |
| 165.000 | | | | | | | | | | -.0597 | -.1939 | -.0755 | -.0556 | -.0582 | |
| 169.000 | | | | | | | | 1.1012 | | | | | | | |
| 174.000 | | | | | | | 1.1799 | | | | | | | | |
| 180.000 | 1.4660 | .9513 | .7114 | .6163 | .5520 | .5350 | | 1.0903 | | -.1958 | -.2036 | -.0230 | -.0465 | -.0523 | |
| 305.000 | | | .7114 | .4428 | .3979 | .4075 | | .1065 | | .0389 | | | | | |
| 320.000 | | | .6590 | .3302 | .2986 | .5386 | | -.1130 | | -.1550 | .0253 | -.0652 | .0009 | .0296 | -.0832 |
| 340.000 | | | .6269 | .2644 | .3019 | .7659 | | -.1651 | | -.1219 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0480 | .1868 | .3658 | .2740 | -.1792 | -.1963 | -.1807 | | -.1480 | -.1411 |
| 40.000 | -.0130 | .1311 | .2395 | -.0583 | -.1956 | -.2294 | -.2357 | | -.1464 | -.1523 |
| 70.000 | .0290 | -.0618 | -.0021 | .1520 | .7624 | .0252 | -.0871 | | | |
| 90.000 | .0365 | -.0186 | .1293 | .1621 | .0370 | .0295 | -.0131 | | | |
| 105.000 | | | .0000 | .1234 | -.0595 | -.0559 | -.0570 | | | |
| 110.000 | | | | | | | | -.1460 | | |
| 120.000 | .0073 | .0311 | .2658 | .1461 | .0584 | -.0910 | -.1722 | -.1820 | | |
| 135.000 | | | .3301 | .3632 | .1178 | .0550 | .0176 | | | |
| 150.000 | -.0012 | .0239 | .3350 | .3918 | .1982 | .1444 | .0720 | | | |
| 165.000 | .0073 | | .3294 | | .4335 | .2299 | -.1431 | | | |
| 180.000 | .0011 | .3819 | .3298 | .4982 | | | | | | |
| 320.000 | -.0002 | .1825 | .3655 | .0458 | -.2331 | -.1568 | -.2033 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RE1834)

BETAO ( 1) = .378 ALPHAO( 2) = -4.209

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4244 | 1.1405 | .5727 | .2089 | .1751 | .9208 | | -.1734 | | -.1816 | .0262 | -.0742 | .0863 | .01 7 | -.1468 |
| 20.000 | | | .5915 | .2430 | .1629 | .6680 | | -.2359 | | -.1455 | | | | | |
| 40.000 | | | .6769 | .3199 | .1932 | .4807 | | -.0823 | | -.2848 | .0000 | .0000 | .0927 | -.1285 | -.0333 |
| 55.000 | | | .7078 | .4188 | .3202 | .2895 | | .1371 | | .0337 | | | | | |
| 70.000 | | | .6877 | .4459 | .3365 | .2462 | | .2371 | | .0000 | -.1926 | -.1929 | -.1237 | -.0332 | |
| 90.000 | | .8148 | .6937 | .4759 | .3499 | .2704 | | .3334 | | .0000 | -.1697 | -.2046 | -.1959 | -.0224 | |
| 120.000 | | | .6988 | .5340 | .4109 | .3897 | | .5599 | | .1534 | -.1094 | -.3149 | -.1679 | -.0438 | |
| 140.000 | | | | | | | | | | .0379 | | | | | |
| 150.000 | | | .6800 | .5499 | .4705 | .4366 | | | | -.0859 | -.2362 | -.1397 | -.1020 | -.0969 | |
| 151.000 | | | | | | | | | .7138 | | | | | | |
| 156.000 | | | | | | | | .9729 | | | | | | | |
| 162.000 | | | | | | | | | .7791 | | | | | | |
| 165.000 | | | | | | | | | | -.0835 | -.2242 | -.1074 | -.0812 | -.0832 | |
| 169.000 | | | | | | | | 1.0659 | | | | | | | |
| 174.000 | | | | | | | 1.1337 | | | | | | | | |
| 180.000 | 1.4244 | .8703 | .6428 | .5592 | .5025 | .4577 | | 1.0541 | | -.2233 | -.2297 | -.0556 | -.0742 | -.0795 | |
| 305.000 | | | .6957 | .4140 | .3650 | .3631 | | .0854 | | .0188 | | | | | |
| 320.000 | | | .6635 | .2854 | .2267 | .5156 | | -.1174 | | -.2633 | .0075 | -.1074 | .0003 | .0270 | -.0942 |
| 340.000 | | | .6303 | .1993 | .1701 | .7355 | | -.3043 | | -.0974 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0772 | .2001 | .3576 | .2679 | -.1833 | -.1892 | -.1657 | | -.1368 | -.1342 |
| 40.000 | -.0209 | .1403 | .2597 | -.0033 | -.2183 | -.2359 | -.2442 | | -.1323 | -.1410 |
| 70.000 | .0117 | -.0891 | -.0416 | .1043 | .6575 | -.0009 | -.1025 | | | |
| 90.000 | .0208 | -.0467 | .1037 | .1213 | .0043 | -.0013 | -.0380 | | | |
| 105.000 | | | .0000 | .1200 | -.0933 | -.0949 | -.0810 | | | |
| 110.000 | | | | | | | | -.1624 | | |
| 120.000 | -.0046 | .0124 | .2271 | .1210 | .0527 | -.1022 | -.1807 | -.1859 | | |
| 135.000 | | | .2956 | .3299 | .0981 | .0232 | .0014 | | | |
| 150.000 | -.0255 | .0127 | .3054 | .3557 | .1729 | .1159 | .0512 | | | |
| 165.000 | -.0255 | | .3025 | | .3027 | .1991 | -.1429 | | | |
| 180.000 | -.0216 | .2591 | .3070 | .4507 | | | | | | |
| 320.000 | -.0036 | .2058 | .3903 | .1330 | -.2173 | -.1638 | -.2009 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET834)

BETAO ( 1) = .358 ALPHAO( 3) = -2.124

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4165 | 1.1392 | .5653 | .1789 | .1473 | .8528 | | -.1957 | | -.1461 | -.0015 | -.1267 | .0803 | .0381 | -.0699 |
| 20.000 | | | .5873 | .2146 | .1428 | .6182 | | -.2600 | | -.1477 | | | | | |
| 40.000 | | | .6718 | .3004 | .1703 | .4373 | | -.0998 | | -.2971 | .0000 | .0000 | .0691 | -.1301 | -.0461 |
| 55.000 | | | .6922 | .4016 | .3030 | .2500 | | .1071 | | -.0019 | | | | | |
| 70.000 | | | .6855 | .4258 | .3228 | .2193 | | .1878 | | .0000 | -.2025 | -.2128 | -.1666 | -.0585 | |
| 90.000 | | .7769 | .6743 | .4539 | .3307 | .2430 | | .2877 | | .0000 | -.1770 | -.2174 | -.2205 | -.0444 | |
| 120.000 | | | .6622 | .4969 | .3810 | .3440 | | .5231 | | .1479 | -.1283 | -.3255 | -.1918 | -.0539 | |
| 140.000 | | | | | | | | | | .0555 | | | | | |
| 150.000 | | | .6294 | .4998 | .4283 | .3855 | | | | -.0980 | -.2628 | -.1717 | -.1272 | -.1195 | |
| 151.000 | | | | | | | | | .6992 | | | | | | |
| 156.000 | | | | | | | | .9498 | | | | | | | |
| 162.000 | | | | | | | | | .7624 | | | | | | |
| 165.000 | | | | | | | | | | -.1064 | -.2512 | -.1400 | -.1100 | -.1097 | |
| 169.000 | | | | | | | | 1.0546 | | | | | | | |
| 174.000 | | | | | | | 1.0311 | | | | | | | | |
| 180.000 | 1.4165 | .8008 | .5895 | .5081 | .4574 | .4040 | | 1.0351 | | -.2448 | -.2548 | -.0905 | -.1039 | -.1065 | |
| 305.000 | | | .6800 | .3923 | .3615 | .3158 | | .0627 | | -.0238 | | | | | |
| 320.000 | | | .6565 | .2735 | .2145 | .4910 | | -.1257 | | -.2922 | -.0193 | -.1308 | -.0157 | .0302 | -.0592 |
| 340.000 | | | .6239 | .1776 | .1468 | .7080 | | -.3290 | | -.1109 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0929 | .2183 | .3619 | .2669 | -.1810 | -.1823 | -.1572 | | -.1285 | -.1293 |
| 40.000 | .0133 | .1712 | .2868 | .0497 | -.2350 | -.2480 | -.2501 | | -.1188 | -.1319 |
| 70.000 | -.0066 | -.1120 | -.0792 | .0736 | .6126 | -.0209 | -.1185 | | | |
| 90.000 | .0028 | -.0722 | .0451 | .0798 | -.0225 | -.0251 | -.0553 | | | |
| 105.000 | | | .0030 | .1170 | -.1049 | -.1193 | -.0953 | | | |
| 110.000 | | | | | | | | -.1755 | | |
| 120.000 | -.0203 | -.0049 | .2107 | .1056 | .0533 | -.1087 | -.1839 | -.1914 | | |
| 135.000 | | | .2620 | .2875 | .0811 | .0007 | -.0230 | | | |
| 150.000 | -.0422 | .0026 | .2737 | .3221 | .1317 | .0887 | .0343 | | | |
| 165.000 | -.0428 | | .2770 | | .3462 | .1687 | -.1406 | | | |
| 180.000 | -.0412 | -.0069 | .2760 | .4069 | | | | | | |
| 320.000 | -.0047 | .2385 | .4138 | .1748 | -.2189 | -.1719 | -.2077 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB34)

BETAO ( 1) = .342 ALPHAO( 4) = -.027

SECTION 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1590 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5029 | 1.1414 | .5513 | .1476 | .1208 | .8269 | | -.1624 | | -.1837 | -.0156 | -.1262 | -.0246 | .0434 | .0491 |
| 20.000 | | | .5818 | .1848 | .1221 | .5565 | | -.2089 | | -.1879 | | | | | |
| 40.000 | | | .6778 | .2845 | .1348 | .3999 | | -.1222 | | -.3151 | .0000 | .0000 | .0561 | -.1158 | -.0434 |
| 55.000 | | | .6918 | .3921 | .2845 | .2245 | | .0769 | | -.0507 | | | | | |
| 70.000 | | | .6782 | .4068 | .3042 | .1872 | | .1425 | | .0000 | -.2198 | -.2307 | -.1729 | -.0845 | |
| 90.000 | | .7796 | .6661 | .4361 | .3148 | .2165 | | .2179 | | .0000 | -.1857 | -.2319 | -.2181 | -.0631 | |
| 120.000 | | | .6225 | .4552 | .3451 | .3093 | | .5052 | | .1315 | -.1455 | -.3320 | -.2156 | -.0939 | |
| 140.000 | | | | | | | | | | .0394 | | | | | |
| 150.000 | | | .5796 | .4529 | .3849 | .3390 | | | | -.1159 | -.2860 | -.2022 | -.1521 | -.1391 | |
| 151.000 | | | | | | | | | .6643 | | | | | | |
| 156.000 | | | | | | | | .9141 | | | | | | | |
| 162.000 | | | | | | | | | .7276 | | | | | | |
| 165.000 | | | | | | | | | | -.1304 | -.2767 | -.1713 | -.1406 | -.1348 | |
| 169.000 | | | | | | | | 1.0092 | | | | | | | |
| 174.000 | | | | | | | 1.0112 | | | | | | | | |
| 180.000 | 1.5029 | .7287 | .5348 | .4596 | .4088 | .3569 | | .9907 | | -.2670 | -.2760 | -.1206 | -.1339 | -.1322 | |
| 305.000 | | | .6699 | .3928 | .3674 | .3081 | | .0402 | | -.0522 | | | | | |
| 320.000 | | | .6450 | .2619 | .2095 | .4764 | | -.1359 | | -.2934 | -.0429 | -.1524 | -.0395 | .0416 | -.0027 |
| 340.000 | | | .6105 | .1535 | .1288 | .7009 | | -.3301 | | -.1259 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9890 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1021 | .2540 | .3784 | .2764 | -.1701 | -.1770 | -.1553 | | -.1246 | -.1253 |
| 40.000 | .0796 | .2142 | .3217 | .0998 | -.2337 | -.2389 | -.2586 | | -.1051 | -.1201 |
| 70.000 | -.0261 | -.1277 | -.1170 | .0414 | .5469 | -.0335 | -.1277 | | | |
| 90.000 | -.0105 | -.0798 | .0486 | .0848 | -.0511 | -.0485 | -.0740 | | | |
| 105.000 | | | .0000 | .0897 | -.1101 | -.1352 | -.1176 | | | |
| 110.000 | | | | | | | | -.1884 | | |
| 120.000 | -.0352 | -.0239 | .1995 | .1311 | .0548 | -.1091 | -.1813 | -.1529 | | |
| 135.000 | | | .2035 | .2298 | .0945 | -.0103 | -.0396 | | | |
| 150.000 | -.0541 | -.0125 | .2309 | .2802 | .0972 | .0686 | .0124 | | | |
| 165.000 | -.0580 | | .2494 | | .3124 | .1379 | -.1358 | | | |
| 180.000 | -.0593 | -.0180 | .2527 | .3701 | | | | | | |
| 320.000 | .0332 | .2856 | .4319 | .1916 | -.2180 | -.1728 | -.2226 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB34)

BETAO ( 1) = .346 ALPHAO( 5) = 2.059

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5065 | 1.1534 | .5478 | .1246 | .1018 | .8259 | | -.1516 | | -.1715 | -.0042 | -.1237 | -.0651 | .0474 | .0856 |
| 20.000 | | | .5821 | .1647 | .0986 | .5474 | | -.2135 | | -.1810 | | | | | |
| 40.000 | | | .6801 | .2778 | .1243 | .3857 | | -.1362 | | -.3153 | .0000 | .0000 | .0175 | -.0502 | -.0142 |
| 55.000 | | | .6902 | .3874 | .2829 | .2071 | | .0591 | | -.0757 | | | | | |
| 70.000 | | | .6633 | .3995 | .2978 | .1654 | | .1195 | | .0000 | -.2267 | -.1975 | -.1878 | -.1096 | |
| 90.000 | | .7585 | .6534 | .4211 | .2997 | .1985 | | .1611 | | .0000 | -.1972 | -.2329 | -.2170 | -.0804 | |
| 120.000 | | | .5922 | .4227 | .3093 | .2778 | | .4874 | | .1162 | -.1564 | -.3321 | -.2215 | -.1296 | |
| 140.000 | | | | | | | | | | .0324 | | | | | |
| 150.000 | | | .5342 | .4100 | .3446 | .3045 | | | | -.1314 | -.3067 | -.2265 | -.1735 | -.1445 | |
| 151.000 | | | | | | | | | .6359 | | | | | | |
| 156.000 | | | | | | | | .8834 | | | | | | | |
| 162.000 | | | | | | | | | .6940 | | | | | | |
| 165.000 | | | | | | | | | | -.1542 | -.3003 | -.1967 | -.1668 | -.1438 | |
| 169.000 | | | | | | | | .9580 | | | | | | | |
| 174.000 | | | | | | | 1.0255 | | | | | | | | |
| 180.000 | 1.5065 | .6579 | .4875 | .4182 | .3563 | .3154 | | .9453 | | -.2849 | -.2977 | -.1484 | -.1601 | -.1445 | |
| 305.000 | | | .6642 | .3953 | .3554 | .2928 | | .0206 | | -.0841 | | | | | |
| 320.000 | | | .6521 | .2648 | .2138 | .4589 | | -.1534 | | -.3025 | -.0196 | -.1894 | -.0470 | .0664 | .0508 |
| 340.000 | | | .6104 | .1351 | .1126 | .6973 | | -.3503 | | -.1378 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1559 | .3102 | .4223 | .3154 | -.1634 | -.1712 | -.1533 | | -.1262 | -.1243 |
| 40.000 | .1400 | .2730 | .3651 | .1318 | -.2330 | -.2457 | -.2631 | | -.1009 | -.1139 |
| 70.000 | -.0337 | -.1393 | -.1414 | -.0085 | .5419 | -.0443 | -.1396 | | | |
| 90.000 | -.0151 | -.0896 | -.0773 | .0839 | -.0521 | -.0898 | -.1076 | | | |
| 105.000 | | | .0000 | .1350 | -.0960 | -.1686 | -.1474 | | | |
| 110.000 | | | | | | | | -.1879 | | |
| 120.000 | -.0467 | -.0248 | .1662 | .1490 | .0124 | -.1079 | -.1737 | -.1824 | | |
| 135.000 | | | .1636 | .2302 | .1032 | -.0168 | -.0599 | | | |
| 150.000 | -.0623 | .0094 | .1675 | .2517 | .1061 | .0542 | -.0126 | | | |
| 165.000 | -.0694 | | .2059 | | .2676 | .1150 | -.1341 | | | |
| 180.000 | -.0688 | -.0147 | .2211 | .3333 | | | | | | |
| 320.000 | .1183 | .3349 | .4642 | .2195 | -.2268 | -.1701 | -.2369 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB34)

BETA0 ( I) = .358 ALPHA( 6) = 3.707

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4890 | 1.1635 | .5435 | .0995 | .0870 | .8425 | | -.1606 | | -.1615 | .0113 | -.1370 | -.0884 | .0729 | .0891 |
| 20.000 | | | .5774 | .1435 | .0799 | .5561 | | -.2435 | | -.1657 | | | | | |
| 40.000 | | | .6763 | .2668 | .1249 | .3837 | | -.1333 | | -.2908 | .0000 | .0000 | -.0016 | .0095 | .0008 |
| 55.000 | | | .6842 | .3835 | .2798 | .1982 | | .0474 | | -.0799 | | | | | |
| 70.000 | | | .6567 | .3899 | .2861 | .1497 | | .0999 | | .0000 | -.1957 | -.1938 | -.1930 | -.1256 | |
| 90.000 | | .7499 | .6361 | .4023 | .2823 | .1814 | | .1365 | | .0000 | -.2047 | -.2114 | -.2299 | -.0999 | |
| 120.000 | | | .5644 | .3909 | .2757 | .2510 | | .4597 | | .1062 | -.1652 | -.3393 | -.2429 | -.1437 | |
| 140.000 | | | | | | | | | | .0315 | | | | | |
| 150.000 | | | .4925 | .3671 | .3027 | .2697 | | | | -.1460 | -.3256 | -.2540 | -.1873 | -.1566 | |
| 151.000 | | | | | | | | | .6143 | | | | | | |
| 156.000 | | | | | | | | .8540 | | | | | | | |
| 162.000 | | | | | | | | | .6641 | | | | | | |
| 165.000 | | | | | | | | | | -.1751 | -.3186 | -.2184 | -.1904 | -.1489 | |
| 169.000 | | | | | | | | .9232 | | | | | | | |
| 174.000 | | | | | | | 1.0175 | | | | | | | | |
| 180.000 | 1.4890 | .5914 | .4418 | .3769 | .3253 | .2786 | | .9033 | | -.3028 | -.3170 | -.1758 | -.1841 | -.1427 | |
| 305.000 | | | .6770 | .3985 | .3519 | .2757 | | .0010 | | -.1004 | | | | | |
| 320.000 | | | .6589 | .2604 | .2065 | .4332 | | -.1441 | | -.2951 | -.0083 | -.2053 | -.0506 | .1118 | .0875 |
| 340.000 | | | .6077 | .1220 | .0989 | .6930 | | -.3823 | | -.1383 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .2033 | .3558 | .4624 | .3491 | -.1292 | -.1559 | -.1418 | | -.1118 | -.1118 |
| 40.000 | .1832 | .3051 | .4030 | .1225 | -.2127 | -.1893 | -.2151 | | -.0983 | -.1151 |
| 70.000 | -.0394 | -.1495 | -.1678 | -.0491 | .5531 | -.0597 | -.1486 | | | |
| 90.000 | -.0252 | -.1015 | -.1181 | .0628 | -.0506 | -.1094 | -.1295 | | | |
| 105.000 | | | .0000 | .1154 | -.1000 | -.1835 | -.1904 | | | |
| 110.000 | | | | | | | | -.1859 | | |
| 120.000 | -.0592 | -.0400 | .1635 | .1485 | -.0103 | -.1295 | -.1814 | -.1713 | | |
| 135.000 | | | .1794 | .2157 | .0534 | -.0460 | -.0783 | | | |
| 150.000 | -.0599 | .0413 | .1725 | .2329 | .1193 | .0318 | -.0382 | | | |
| 165.000 | -.0631 | | .1878 | | .2280 | .0943 | -.1302 | | | |
| 180.000 | -.0644 | .0104 | .1995 | .2893 | | | | | | |
| 320.000 | .1955 | .3660 | .4789 | .2273 | -.2023 | -.1409 | -.1940 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB34)

BETAO ( 1) = .369 ALPHAO( 7) = 6.242

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4799 | 1.1759 | .5194 | .0745 | .0629 | .8521 | | -.1454 | | -.1550 | -.0072 | -.1683 | -.0435 | .0913 | .1264 |
| 20.000 | | | .5474 | .1129 | .0507 | .5670 | | -.2614 | | -.1550 | | | | | |
| 40.000 | | | .6690 | .2495 | .1187 | .3764 | | -.1340 | | -.3003 | .0000 | .0000 | .0186 | .0514 | .0017 |
| 55.000 | | | .6763 | .3756 | .2811 | .1839 | | .0422 | | -.0671 | | | | | |
| 70.000 | | | .6442 | .3852 | .2782 | .1371 | | .0843 | | .0000 | -.2078 | -.2079 | -.1924 | -.1264 | |
| 90.000 | | .7287 | .6192 | .3965 | .2651 | .1659 | | .1142 | | .0000 | -.1921 | -.2295 | -.2449 | -.1092 | |
| 120.000 | | | .5359 | .3559 | .2415 | .2198 | | .4282 | | .0986 | -.1737 | -.3310 | -.2813 | -.1251 | |
| 140.000 | | | | | | | | | | .0275 | | | | | |
| 150.000 | | | .4473 | .3218 | .2682 | .2351 | | | | -.1609 | -.3470 | -.2771 | -.2073 | -.1650 | |
| 151.000 | | | | | | | | | .6005 | | | | | | |
| 156.000 | | | | | | | | .8573 | | | | | | | |
| 162.000 | | | | | | | | | .6453 | | | | | | |
| 165.000 | | | | | | | | | | -.1969 | -.3371 | -.2430 | -.2073 | -.1628 | |
| 169.000 | | | | | | | | .9205 | | | | | | | |
| 174.000 | | | | | | | .9730 | | | | | | | | |
| 180.000 | 1.4799 | .5363 | .3940 | .3336 | .2902 | .2418 | | .8776 | | -.3239 | -.3345 | -.2019 | -.2048 | -.1608 | |
| 305.000 | | | .6859 | .3814 | .3357 | .2555 | | -.0097 | | -.0728 | | | | | |
| 320.000 | | | .6699 | .2384 | .1858 | .4047 | | -.1403 | | -.2618 | -.0191 | -.2366 | -.0359 | .1355 | .1572 |
| 340.000 | | | .6001 | .0925 | .0803 | .6688 | | -.3774 | | -.1220 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .2514 | .4002 | .5113 | .3811 | -.1670 | -.1602 | -.1534 | | -.1244 | -.1289 |
| 40.000 | .2300 | .3410 | .4371 | .1549 | -.2552 | -.1625 | -.1830 | | -.1169 | -.1165 |
| 70.000 | -.0545 | -.1670 | -.1799 | -.0690 | .5594 | -.0805 | -.1563 | | | |
| 90.000 | -.0376 | -.1195 | -.1372 | .0454 | -.0798 | -.1299 | -.1489 | | | |
| 105.000 | | | .0000 | .0999 | -.1058 | -.1976 | -.2174 | | | |
| 110.000 | | | | | | | | -.1934 | | |
| 120.000 | -.0874 | -.0557 | .1520 | .1324 | .0061 | -.1443 | -.1947 | -.1703 | | |
| 135.000 | | | .1608 | .1952 | .0237 | -.0761 | -.0985 | | | |
| 150.000 | -.0480 | .0533 | .1608 | .2202 | .0986 | .0164 | -.0498 | | | |
| 165.000 | -.0441 | | .1741 | | .2091 | .0733 | -.1333 | | | |
| 180.000 | -.0435 | .0343 | .1849 | .2916 | | | | | | |
| 320.000 | .2381 | .3909 | .4908 | .2352 | -.1508 | -.1736 | -.2122 | | | |

ARC97-010 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB35) ( 04 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.550 RN/FT = 2.500
ELV-IB = 8.000 ELV-OB = -4.000
RUDDER = .000 SPOBRK = .000

ALPHAO( 1) = -6.333 BETAO ( 1) = -3.794

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4411 | 1.0035 | .5484 | .3053 | .3270 | 1.1039 | | -.0275 | | -.1806 | .0994 | .0376 | .0338 | -.1316 | -.0692 |
| 20.000 | | | .6126 | .3758 | .3221 | .8067 | | .0000 | | -.0867 | | | | | |
| 40.000 | | | .7806 | .4720 | .3529 | .5767 | | .0131 | | -.2198 | .0000 | -.0014 | .0985 | -.0925 | .0105 |
| 55.000 | | | .8707 | .6141 | .4837 | .4490 | | .2496 | | .1229 | | | | | |
| 70.000 | | | .8617 | .6336 | .4891 | .4152 | | .3239 | | .0000 | -.1289 | -.1157 | -.0239 | .0299 | |
| 90.000 | | 1.0243 | .8662 | .6529 | .4939 | .4228 | | .4011 | | .0000 | -.0895 | -.1310 | -.1055 | .0363 | |
| 120.000 | | | .8502 | .6785 | .5435 | .5253 | | .6682 | | .2635 | -.0191 | -.2422 | -.1057 | .0334 | |
| 140.000 | | | | | | | | | | .2315 | | | | | |
| 150.000 | | | .7882 | .6367 | .5514 | .5553 | | | | .0224 | -.2109 | -.1130 | -.0518 | -.0213 | |
| 151.000 | | | | | | | | | .8238 | | | | | | |
| 158.000 | | | | | | | | 1.0705 | | | | | | | |
| 162.000 | | | | | | | | | .8745 | | | | | | |
| 165.000 | | | | | | | | | | -.0558 | -.1710 | -.0928 | -.0502 | -.0457 | |
| 169.000 | | | | | | | | 1.1196 | | | | | | | |
| 174.000 | | | | | | | 1.1916 | | | | | | | | |
| 180.000 | 1.4411 | .4540 | .6918 | .5967 | .5349 | .5403 | | 1.0476 | | -.1546 | -.1994 | -.0698 | -.0502 | -.0605 | |
| 305.000 | | | .5265 | .2915 | .3571 | .3743 | | .0517 | | -.0429 | | | | | |
| 320.000 | | | .5301 | .2515 | .3517 | .4758 | | -.2026 | | -.1968 | -.0175 | -.0749 | -.0380 | .0513 | -.0390 |
| 340.000 | | | .5551 | .2534 | .3255 | .7024 | | -.0899 | | -.2805 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0377 | .2875 | .5558 | .2946 | -.1328 | -.1959 | -.1635 | | -.1174 | -.1162 |
| 40.000 | .0574 | .0850 | .2782 | -.0895 | -.2535 | -.2089 | -.2713 | | -.1245 | -.1184 |
| 70.000 | .0570 | -.0380 | -.0431 | .1248 | .1184 | .0599 | -.0524 | | | |
| 90.000 | .0667 | .0009 | .0098 | .1685 | .0958 | .0540 | .0182 | | | |
| 105.000 | | | .1274 | .2110 | -.0085 | -.0291 | -.0229 | | | |
| 110.000 | | | | | | | | -.1172 | | |
| 120.000 | .0295 | .0407 | .3017 | .2628 | .1103 | -.0351 | -.0678 | -.0900 | | |
| 135.000 | | | .3403 | .3685 | .1322 | .1014 | .0837 | | | |
| 150.000 | -.0040 | .0136 | .3335 | .3731 | .1769 | .2352 | .1522 | | | |
| 165.000 | -.0053 | | .3101 | | .5211 | .3455 | -.1115 | | | |
| 180.000 | -.0306 | - 5 | .2953 | .3789 | | | | | | |
| 320.000 | -.0913 | .2303 | .4526 | .3017 | -.1303 | -.1224 | -.1413 | | | |

ARC97-019 !A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB35)

ALPHAO( 1) = -6.319 BETAO ( 2) = -1.683

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4787 | 1.0142 | .5657 | .3183 | .3470 | 1.0818 | | -.0581 | | -.2664 | .0737 | .0290 | .0404 | -.1078 | -.1557 |
| 20.000 | | | .6034 | .3637 | .3531 | .7800 | | .0000 | | -.1268 | | | | | |
| 40.000 | | | .7296 | .4382 | .3418 | .5558 | | -.0265 | | -.2371 | .0000 | .0100 | .1214 | -.0944 | .0054 |
| 55.000 | | | .7928 | .5388 | .4330 | .4126 | | .2056 | | .0831 | | | | | |
| 70.000 | | | .7925 | .5669 | .4412 | .3775 | | .2927 | | .0000 | -.1547 | -.1528 | -.0569 | .0160 | |
| 90.000 | | .9446 | .7999 | .5939 | .4455 | .3826 | | .3741 | | .0000 | -.1200 | -.1590 | -.1344 | .0209 | |
| 120.000 | | | .8056 | .6282 | .4997 | .4901 | | .6313 | | .2171 | -.0547 | -.2717 | -.1251 | .0061 | |
| 140.000 | | | | | | | | | | .1579 | | | | | |
| 150.000 | | | .7685 | .6236 | .5370 | .5437 | | | | -.0247 | -.2098 | -.1065 | -.0502 | -.0533 | |
| 151.000 | | | | | | | | | .7848 | | | | | | |
| 156.000 | | | | | | | | 1.0375 | | | | | | | |
| 162.000 | | | | | | | | | .8484 | | | | | | |
| 165.000 | | | | | | | | | | -.0560 | -.1869 | -.0877 | -.0444 | -.0530 | |
| 169.000 | | | | | | | | 1.1071 | | | | | | | |
| 174.000 | | | | | | | 1.1966 | | | | | | | | |
| 180.000 | 1.4787 | .9580 | .7056 | .6080 | .5443 | .5491 | | 1.0728 | | -.1702 | -.2024 | -.0374 | -.0412 | -.0530 | |
| 305.000 | | | .6165 | .3796 | .3883 | .4021 | | .0787 | | -.0074 | | | | | |
| 320.000 | | | .6035 | .3137 | .3753 | .5172 | | -.1612 | | -.1805 | .0010 | -.0384 | -.0012 | .0462 | -.0847 |
| 340.000 | | | .5961 | .2899 | .3536 | .7373 | | -.1087 | | -.2201 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0745 | .2415 | .4562 | .2817 | -.1790 | -.2089 | -.1769 | | -.1383 | -.1399 |
| 40.000 | .0360 | .1104 | .2872 | -.1089 | -.2314 | -.2121 | -.2610 | | -.1409 | -.1364 |
| 70.000 | .0360 | -.0489 | -.0287 | .1387 | .0985 | .0429 | -.0643 | | | |
| 90.000 | .0472 | -.0045 | .0991 | .1525 | .0590 | .0451 | .0065 | | | |
| 105.000 | | | .2132 | .1695 | -.0359 | -.0382 | -.0364 | | | |
| 110.000 | | | | | | | | -.1237 | | |
| 120.000 | .0183 | .0386 | .2788 | .1933 | .0966 | -.0602 | -.1186 | -.1166 | | |
| 135.000 | | | .3357 | .3831 | .1374 | .0816 | .0562 | | | |
| 150.000 | -.0013 | .0270 | .3392 | .4008 | .2010 | .1880 | .1172 | | | |
| 165.000 | -.0026 | | .3235 | | .4840 | .2801 | -.1320 | | | |
| 180.000 | .0016 | .0151 | .3129 | .4753 | | | | | | |
| 320.000 | -.1300 | .2431 | .3964 | .2158 | -.1362 | -.1391 | -.1673 | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE 'RETB35)

ALPHAO( 1) = -6.080 BETAO ( 3) = .391

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4723 | 1.0389 | .5782 | .2939 | .3098 | 1.0087 | | -.0855 | | -.2619 | .0407 | .0007 | .0651 | .0052 | -.1688 |
| 20.000 | | | .5891 | .3327 | .3183 | .7543 | | .0060 | | -.2085 | | | | | |
| 40.000 | | | .6704 | .3835 | .3156 | .5354 | | -.0576 | | -.1796 | .0000 | -.0003 | .1008 | -.1333 | -.0381 |
| 55.000 | | | .7062 | .4588 | .3752 | .3997 | | .1787 | | .0527 | | | | | |
| 70.000 | | | .7114 | .4820 | .3844 | .3479 | | .2831 | | .0000 | -.1860 | -.1918 | -.0864 | .0025 | |
| 90.000 | | .8442 | .7267 | .5117 | .3918 | .3412 | | .3621 | | .0000 | -.1563 | -.1937 | -.1709 | .0051 | |
| 120.000 | | | .7491 | .5753 | .4567 | .4487 | | .5936 | | .1692 | -.0895 | -.3022 | -.1417 | -.0257 | |
| 140.000 | | | | | | | | | | .0510 | | | | | |
| 150.000 | | | .7411 | .6099 | .5261 | .5188 | | | | -.0644 | -.2076 | -.1047 | -.0697 | -.0716 | |
| 151.000 | | | | | | | | | .7429 | | | | | | |
| 156.000 | | | | | | | | 1.0110 | | | | | | | |
| 162.000 | | | | | | | | | .8149 | | | | | | |
| 165.000 | | | | | | | | | | -.0570 | -.1902 | -.0691 | -.0505 | -.0539 | |
| 169.000 | | | | | | | | 1.1046 | | | | | | | |
| 174.000 | | | | | | | 1.1802 | | | | | | | | |
| 180.000 | 1.4723 | .9588 | .7146 | .6197 | .5572 | .5405 | | 1.0944 | | -.1934 | -.2018 | -.0161 | -.0437 | -.0490 | |
| 305.000 | | | .7107 | .4508 | .4020 | .4122 | | .1112 | | .0433 | | | | | |
| 320.000 | | | .6655 | .3339 | .3114 | .5440 | | -.1100 | | -.1347 | .0320 | -.0620 | .0041 | .0321 | -.0922 |
| 340.000 | | | .6329 | .2761 | .2861 | .7648 | | -.1726 | | -.1154 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0398 | .1957 | .3703 | .2762 | -.1762 | -.1936 | -.1775 | | -.1456 | -.1395 |
| 40.000 | -.0062 | .1326 | .2447 | -.0584 | -.2000 | -.2197 | -.2308 | | -.1459 | -.1501 |
| 70.000 | .0308 | -.0594 | .0038 | .1554 | .1014 | .0282 | -.0835 | | | |
| 90.000 | .0389 | -.0165 | .1339 | .1654 | .0391 | .0314 | -.0101 | | | |
| 105.000 | | | .2192 | .1213 | -.0563 | -.0556 | -.0525 | | | |
| 110.000 | | | | | | | | -.1424 | | |
| 120.000 | .0089 | .0360 | .2685 | .1529 | .0517 | -.0878 | -.1675 | -.1765 | | |
| 135.000 | | | .3359 | .3686 | .1210 | .0587 | .0201 | | | |
| 150.000 | .0012 | .0288 | .3406 | .3991 | .2015 | .1507 | .0754 | | | |
| 155.000 | .0047 | | .3313 | | .4323 | .2324 | -.1360 | | | |
| 160.000 | .0031 | .0248 | .3332 | .5008 | | | | | | |
| 320.000 | .0051 | .1880 | .3548 | .0997 | -.2277 | -.1534 | -.1996 | | | |

ARC97-019 IA81 LVAP(ALL HL SEALED) ORB. FUSELAGE (RETB35)

ALPHAC( 1) = -8.299 BETAO ( 4) = 2.522

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4410 | 1.0586 | .5731 | .2560 | .2533 | 1.0760 | | -.1266 | | -.1644 | -.0132 | .0191 | .1282 | .0470 | -.1350 |
| 20.000 | | | .5718 | .2680 | .2395 | .7075 | | .0000 | | -.2420 | | | | | |
| 40.000 | | | .6128 | .3148 | .2196 | .4830 | | -.1216 | | -.1915 | .0000 | -.0125 | .0264 | -.1586 | -.0763 |
| 55.000 | | | .6375 | .3766 | .2912 | .3696 | | .1330 | | .0142 | | | | | |
| 70.000 | | | .6314 | .4001 | .3059 | .2799 | | .2621 | | .0000 | -.2166 | -.2202 | -.1136 | -.0022 | |
| 90.000 | | .7611 | .6637 | .4424 | .3194 | .2604 | | .3360 | | .0000 | -.1918 | -.2238 | -.1946 | -.0083 | |
| 120.000 | | | .6967 | .5280 | .4025 | .3805 | | .5349 | | .1166 | -.1230 | -.3314 | -.1673 | -.0645 | |
| 140.000 | | | | | | | | | | -.0335 | | | | | |
| 150.000 | | | .7121 | .5889 | .4964 | .4750 | | | | -.1000 | -.2018 | -.1072 | -.0954 | -.0860 | |
| 151.000 | | | | | | | | | .6837 | | | | | | |
| 156.000 | | | | | | | | .9632 | | | | | | | |
| 162.000 | | | | | | | | | .7672 | | | | | | |
| 165.000 | | | | | | | | | | -.0523 | -.2102 | -.0385 | -.0584 | -.0657 | |
| 169.000 | | | | | | | | 1.0773 | | | | | | | |
| 174.000 | | | | | | | 1.1660 | | | | | | | | |
| 180.000 | 1.4410 | .9286 | .7169 | .6207 | .5513 | .5322 | | 1.0872 | | -.1792 | -.1972 | -.0494 | -.0475 | -.0586 | |
| 305.000 | | | .7845 | .5259 | .4619 | .4399 | | .1585 | | .0817 | | | | | |
| 320.000 | | | .7018 | .3702 | .3339 | .5785 | | -.0411 | | -.2370 | .0595 | -.0998 | .0161 | -.0876 | -.0518 |
| 340.000 | | | .6464 | .2683 | .2659 | .8103 | | -.2992 | | -.0913 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0854 | .1889 | .3842 | .2781 | -.1690 | -.1893 | -.1697 | | -.1383 | -.1327 |
| 40.000 | -.1379 | .1057 | .3735 | .1215 | -.2489 | -.1642 | -.1764 | | -.1398 | -.1427 |
| 70.000 | .0208 | -.0599 | .0120 | .1837 | .0899 | .0191 | -.0944 | | | |
| 90.000 | .0213 | -.0181 | .1140 | .1859 | .0171 | .0068 | -.0262 | | | |
| 105.000 | | | .2124 | .1098 | -.0750 | -.0921 | -.0667 | | | |
| 110.000 | | | | | | | | -.1529 | | |
| 120.000 | -.0096 | .0213 | .2533 | .0906 | .0149 | -.1233 | -.2131 | -.2166 | | |
| 135.000 | | | .3094 | .3396 | .0954 | .0134 | -.0143 | | | |
| 150.000 | -.0187 | .0081 | .3197 | .3753 | .1816 | .0938 | .0311 | | | |
| 165.000 | -.0129 | | .3184 | | .3895 | .1775 | -.1442 | | | |
| 180.000 | -.0138 | .0159 | .3278 | .4670 | | | | | | |
| 320.000 | -.0284 | .1908 | .3078 | -.0531 | -.2090 | -.1603 | -.2424 | | | |

AP097-019 TAB1 (VARIABLE SEALED) ORB. FUSELAGE (RET935)

ALPHA0( 1) = -6.042 BETA0 S1 = .587

SECTION 1 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4704 | .9367 | .5559 | .2919 | .2949 | 1.1101 | | -.0917 | | -.1354 | -.0964 | -.0155 | .1064 | .0292 | -.1592 |
| 20.000 | | | .5188 | .2623 | .2751 | .6663 | | .0000 | | -.2748 | | | | | |
| 40.000 | | | .5230 | .2772 | .2644 | .4405 | | -.1670 | | -.1660 | .0000 | -.0406 | -.0188 | -.1939 | -.1328 |
| 55.000 | | | .5405 | .3032 | .2571 | .3476 | | .1091 | | -.0240 | | | | | |
| 70.000 | | | .5537 | .3249 | .2589 | .2716 | | .2359 | | .0000 | -.2449 | -.2607 | -.1332 | -.0147 | |
| 90.000 | | .6444 | .5821 | .3506 | .2635 | .2448 | | .3097 | | .0000 | -.2195 | -.2589 | -.1967 | -.0237 | |
| 120.000 | | | .6237 | .4605 | .3377 | .3192 | | .4803 | | .0722 | -.1579 | -.3435 | -.2031 | -.1050 | |
| 140.000 | | | | | | | | | | -.0877 | | | | | |
| 150.000 | | | .6595 | .5518 | .4565 | .4242 | | | | -.1196 | -.2217 | -.0849 | -.0935 | -.1087 | |
| 151.000 | | | | | | | | | .6214 | | | | | | |
| 156.000 | | | | | | | | .9108 | | | | | | | |
| 162.000 | | | | | | | | | .7242 | | | | | | |
| 165.000 | | | | | | | | | | -.0751 | -.2240 | -.0454 | -.0527 | -.0845 | |
| 169.000 | | | | | | | | 1.0420 | | | | | | | |
| 174.000 | | | | | | | 1.1325 | | | | | | | | |
| 180.000 | 1.4704 | .8921 | .6985 | .6019 | .5347 | .5108 | | 1.0517 | | -.1670 | -.1972 | -.0833 | -.0493 | -.0685 | |
| 305.000 | | | .8589 | .6215 | .5235 | .4587 | | .1922 | | .1250 | | | | | |
| 320.000 | | | .7342 | .4452 | .3655 | .5328 | | -.0080 | | -.2055 | .0973 | -.0996 | .0267 | -.1312 | -.0428 |
| 340.000 | | | .6484 | .3316 | .2991 | .8193 | | -.2841 | | -.1632 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8791 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0113 | .1753 | .3946 | .2973 | -.1530 | -.1797 | -.1637 | | -.1299 | -.1274 |
| 40.000 | -.1116 | .0543 | .4284 | .2316 | -.2547 | -.1391 | -.1578 | | -.1334 | -.1331 |
| 70.000 | .0167 | -.0672 | -.0053 | .1878 | .1520 | .0603 | -.0546 | | | |
| 90.000 | .0157 | -.0251 | .0959 | .1975 | .1012 | .0362 | -.0123 | | | |
| 105.000 | | | .1898 | .1844 | .0227 | -.0278 | -.0341 | | | |
| 110.000 | | | | | | | | -.1460 | | |
| 120.000 | -.0213 | .0031 | .2104 | .0259 | -.0343 | -.0918 | -.2009 | -.1730 | | |
| 135.000 | | | .2697 | .2881 | .0529 | .0522 | .0005 | | | |
| 150.000 | -.0386 | -.0092 | .2777 | .3243 | .1411 | .0404 | .0335 | | | |
| 165.000 | -.0402 | | .2918 | | .3246 | .1333 | -.1515 | | | |
| 180.000 | -.0499 | -.0115 | .2893 | .3667 | | | | | | |
| 320.000 | .0022 | .1917 | .3168 | -.0993 | -.1913 | -.1598 | -.2657 | | | |

DATE 08 OCT 75 1A81B - PRESSURE SOURCE DATA TABULATION PAGE 4

ARC97-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB35)

ALPHA0( 2) = -0.215 BETA0 ( 1) = -5.870

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3932 | 1.0069 | .5485 | .2761 | .2662 | 1.0680 | | -.0480 | | -.1442 | -.0086 | -.1336 | .0463 | -.1156 | -.0254 |
| 20.000 | | | .6395 | .3691 | .2490 | .8080 | | -.2367 | | -.0539 | | | | | |
| 40.000 | | | .8343 | .5070 | .3649 | .6127 | | .0354 | | -.1947 | .0000 | .0000 | .1098 | -.0674 | .0480 |
| 55.000 | | | .9390 | .6726 | .5235 | .4156 | | .2572 | | .1304 | | | | | |
| 70.000 | | | .9475 | .7019 | .5373 | .3943 | | .3155 | | .0000 | -.1050 | -.0848 | -.0067 | .0163 | |
| 90.000 | | 1.0900 | .9171 | .6933 | .5293 | .4140 | | .3910 | | .0000 | -.0642 | -.1099 | -.0895 | .0249 | |
| 120.000 | | | .8638 | .6733 | .5317 | .4900 | | .6088 | | .2949 | .0010 | -.2187 | -.1350 | .0048 | |
| 149.000 | | | | | | | | | | .2677 | | | | | |
| 150.000 | | | .7547 | .5822 | .4983 | .4767 | | | | .0540 | -.2344 | -.1775 | -.0954 | -.0325 | |
| 151.000 | | | | | | | | | .8258 | | | | | | |
| 156.000 | | | | | | | | 1.0582 | | | | | | | |
| 162.000 | | | | | | | | | .8657 | | | | | | |
| 165.000 | | | | | | | | | | -.0844 | -.2013 | -.1312 | -.0859 | -.0647 | |
| 169.000 | | | | | | | | 1.0848 | | | | | | | |
| 174.000 | | | | | | | 1.1503 | | | | | | | | |
| 180.000 | 1.3932 | .8080 | .6230 | .5252 | .4598 | .4369 | | .9666 | | -.1756 | -.2331 | -.1281 | -.0891 | -.0981 | |
| 305.000 | | | .4333 | .1977 | .2601 | .3206 | | -.0256 | | -.1024 | | | | | |
| 320.000 | | | .4751 | .1824 | .2430 | .4074 | | -.2631 | | -.2463 | -.0854 | -.1223 | -.1035 | .0210 | .0846 |
| 340.000 | | | .5385 | .2098 | .2414 | .6588 | | -.0870 | | -.3092 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0353 | .3141 | .5985 | .3257 | -.1044 | -.2426 | -.1547 | | -.1208 | -.1317 |
| 40.000 | .0752 | .1254 | .3484 | -.0528 | -.2552 | -.2026 | -.3006 | | -.1463 | -.1126 |
| 70.000 | .0535 | -.0530 | -.0632 | .0491 | .0112 | .0616 | -.0583 | | | |
| 90.000 | .0687 | -.0170 | -.0274 | .1600 | .0658 | .0404 | .0075 | | | |
| 105.000 | | | .0000 | .2110 | .0128 | -.0605 | -.0353 | | | |
| 110.000 | | | | | | | | -.1303 | | |
| 120.000 | .0009 | -.0023 | .1915 | .2456 | .1093 | -.0331 | -.0632 | -.0927 | | |
| 135.000 | | | .2926 | .3017 | .1009 | .0250 | .0859 | | | |
| 150.000 | -.0452 | -.0297 | .2867 | .2933 | .0979 | .2391 | .1498 | | | |
| 165.000 | -.0676 | | .2646 | | .5224 | .3757 | -.1096 | | | |
| 180.000 | -.0968 | -.0645 | .2506 | .2677 | | | | | | |
| 320.000 | -.1166 | .3195 | .5320 | .3657 | -.1185 | -.1368 | -.1482 | | | |

ARC97-019 (A8) (VARIABLE SCALED) ORB. FUSELAGE (REY835)

ALPHA0( 2) = -4.211 BETA0 ( 2) = -3.857

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4047 | 1.0212 | .5524 | .2767 | .2583 | 1.0783 | | -.0433 | | -.1858 | .0694 | -.0482 | .0409 | -.1375 | -.0541 |
| 20.000 | | | .6297 | .3550 | .2475 | .7949 | | -.2246 | | -.0954 | | | | | |
| 40.000 | | | .7894 | .4676 | .3388 | .5665 | | .0038 | | -.2325 | .0000 | .0000 | .0792 | -.0955 | .0009 |
| 55.000 | | | .8608 | .6037 | .4692 | .4011 | | .2157 | | .0919 | | | | | |
| 70.000 | | | .8447 | .6212 | .4781 | .3661 | | .2735 | | .0000 | -.1355 | -.1272 | -.0709 | .0030 | |
| 90.000 | | .9945 | .8429 | .6314 | .4771 | .3807 | | .3639 | | .0000 | -.0999 | -.1407 | -.1305 | .0135 | |
| 120.000 | | | .8117 | .6352 | .5019 | .4733 | | .6413 | | .2479 | -.0353 | -.2519 | -.1394 | .0059 | |
| 140.000 | | | | | | | | | | .2150 | | | | | |
| 150.000 | | | .7348 | .5808 | .4971 | .4838 | | | | .0084 | -.2393 | -.1598 | -.0862 | -.0522 | |
| 151.000 | | | | | | | | | .8006 | | | | | | |
| 156.000 | | | | | | | | 1.0389 | | | | | | | |
| 162.000 | | | | | | | | | .8472 | | | | | | |
| 165.000 | | | | | | | | | | -.0825 | -.1997 | -.1245 | -.0921 | -.0756 | |
| 169.000 | | | | | | | | 1.0853 | | | | | | | |
| 174.000 | | | | | | | 1.1530 | | | | | | | | |
| 180.000 | 1.4047 | .8901 | .6326 | .5436 | .4825 | .4647 | | 1.0104 | | -.1792 | -.2295 | -.1034 | -.0934 | -.0912 | |
| 305.000 | | | .5158 | .2669 | .2802 | .3486 | | .0134 | | -.0726 | | | | | |
| 320.000 | | | .5347 | .2284 | .2809 | .4558 | | -.2154 | | -.2251 | -.0443 | -.1098 | -.0534 | .0456 | .0014 |
| 340.000 | | | .5751 | .2235 | .2579 | .6912 | | -.0932 | | -.2942 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9830 | 1.0140 | 1.0460 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0379 | .2843 | .5444 | .2743 | -.1191 | -.1907 | -.1466 | | -.1060 | -.1021 |
| 40.000 | .0769 | .3112 | .2789 | -.0595 | -.2278 | -.2366 | -.2935 | | -.1060 | -.0995 |
| 70.000 | .2133 | -.0565 | -.0781 | .0709 | .7932 | .0325 | -.0755 | | | |
| 90.000 | .0466 | -.0565 | -.0377 | .1367 | .0478 | .0221 | -.0123 | | | |
| 105.000 | | | .0000 | .1631 | -.0251 | -.0781 | -.0522 | | | |
| 110.000 | | | | | | | | -.1376 | | |
| 120.000 | .0037 | .0053 | .2424 | .2725 | .0899 | -.0568 | -.0876 | -.1129 | | |
| 135.000 | | | .3055 | .3216 | .1039 | .0265 | .0655 | | | |
| 150.000 | -.0333 | -.0083 | .2991 | .3154 | .1025 | .2056 | .1231 | | | |
| 165.000 | -.0506 | | .2795 | | .4610 | .3097 | -.1110 | | | |
| 180.000 | -.0913 | -.0257 | .2603 | .3099 | | | | | | |
| 320.000 | -.0717 | .3769 | .4513 | .3076 | -.1503 | -.1103 | -.1450 | | | |

ARC97-019 IA01 LVAP(ALL HL SEALED) ORB. FUSELAGE (RET835)

ALPHA0( 2) = -4.194 BETA0 ( 3) = .385

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1150 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4281 | 1.1408 | .5721 | .2106 | .1718 | .9335 | | -.1696 | | -.1785 | .0261 | -.0680 | .0799 | .0158 | -.1456 |
| 20.000 | | | .5917 | .2453 | .1636 | .6870 | | -.2456 | | -.1410 | | | | | |
| 40.000 | | | .6802 | .3197 | .1992 | .4843 | | -.3838 | | -.2834 | .0000 | .0000 | .0942 | -.1279 | -.0316 |
| 55.000 | | | .7049 | .4189 | .3248 | .2906 | | .1387 | | .0351 | | | | | |
| 70.000 | | | .6890 | .4453 | .3356 | .2477 | | .2376 | | .0000 | -.1919 | -.1929 | -.1257 | -.0289 | |
| 90.000 | | .8127 | .6986 | .4752 | .3502 | .2718 | | .3375 | | .0000 | -.1691 | -.2063 | -.1958 | -.0192 | |
| 120.000 | | | .7035 | .5325 | .4148 | .3941 | | .5653 | | .1549 | -.1100 | -.3150 | -.1649 | -.0415 | |
| 140.000 | | | | | | | | | | .0370 | | | | | |
| 150.000 | | | .6856 | .5503 | .4722 | .4421 | | | | -.0837 | -.2346 | -.1372 | -.1002 | -.0952 | |
| 151.000 | | | | | | | | | .7153 | | | | | | |
| 156.000 | | | | | | | | .9782 | | | | | | | |
| 162.000 | | | | | | | | | .7822 | | | | | | |
| 165.000 | | | | | | | | | | -.0824 | -.2214 | -.1059 | -.0795 | -.0816 | |
| 169.000 | | | | | | | | 1.0708 | | | | | | | |
| 174.000 | | | | | | | 1.1383 | | | | | | | | |
| 180.000 | 1.4281 | .8739 | .6504 | .5611 | .5053 | .4618 | | 1.0584 | | -.2211 | -.2266 | -.0536 | -.0737 | -.0780 | |
| 305.000 | | | .6963 | .4151 | .3662 | .3639 | | .0682 | | .0191 | | | | | |
| 320.000 | | | .6663 | .2853 | .2331 | .5180 | | -.1149 | | -.2638 | .0101 | -.1046 | -.0039 | .0275 | -.0832 |
| 340.000 | | | .6317 | .2046 | .1746 | .7400 | | -.3031 | | -.0956 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0705 | .1992 | .3553 | .2656 | -.1610 | -.1862 | -.1643 | | -.1342 | -.1310 |
| 40.000 | -.0254 | .1420 | .2601 | -.0055 | -.2145 | -.2357 | -.2395 | | -.1293 | -.1381 |
| 70.000 | .0110 | -.0874 | -.0426 | .1104 | .6669 | -.0005 | -.1023 | | | |
| 90.000 | .0207 | -.0468 | .1009 | .1220 | .0082 | .0008 | -.0343 | | | |
| 105.000 | | | .0000 | .1185 | -.0805 | -.0835 | -.0783 | | | |
| 110.000 | | | | | | | | -.1600 | | |
| 120.000 | -.0040 | .0137 | .2296 | .1195 | .0521 | -.1020 | -.1708 | -.1808 | | |
| 135.000 | | | .2974 | .3309 | .0990 | .0234 | .0027 | | | |
| 150.000 | -.0238 | .0157 | .3059 | .3601 | .1727 | .1190 | .0526 | | | |
| 165.000 | -.0222 | | .3046 | | .3903 | .2001 | -.1412 | | | |
| 180.000 | -.0228 | .0085 | .3049 | .4498 | | | | | | |
| 320.000 | .0003 | .2055 | .3913 | .1376 | -.2165 | -.1613 | -.1980 | | | |

/PC97-019 IA81 EVAP(ALLHL SEALED) ORB. FUSELAGE (RET835)

ALPHA0( 2) = -4.155 BETA0 ( 4) = 4.561

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4288 | 1.0110 | .5671 | .2656 | .2500 | 1.0922 | | -.0944 | | -.1506 | -.1219 | -.1171 | .1140 | .0307 | -.1514 |
| 20.000 | | | .5239 | .2370 | .2504 | .6526 | | -.1519 | | -.2926 | | | | | |
| 40.000 | | | .5194 | .2494 | .2172 | .4156 | | -.1847 | | -.1958 | .0000 | .0000 | -.0149 | -.2057 | -.1514 |
| 55.000 | | | .5220 | .2758 | .2281 | .3157 | | .0554 | | -.0500 | | | | | |
| 70.000 | | | .5359 | .2969 | .2332 | .2320 | | .1809 | | .0000 | -.2550 | -.2756 | -.1655 | -.0391 | |
| 90.000 | | .5896 | .5502 | .3284 | .2455 | .2107 | | .2817 | | .0000 | -.2303 | -.2753 | -.2328 | -.0471 | |
| 120.000 | | | .5933 | .4202 | .3096 | .2867 | | .4732 | | .0827 | -.1782 | -.3595 | -.2182 | -.1289 | |
| 140.000 | | | | | | | | | | -.0949 | | | | | |
| 150.000 | | | .6039 | .5011 | .4124 | .3682 | | | | -.1357 | -.2495 | -.1196 | -.1243 | -.1348 | |
| 151.000 | | | | | | | | | .5968 | | | | | | |
| 156.000 | | | | | | | | .8788 | | | | | | | |
| 162.000 | | | | | | | | | .6937 | | | | | | |
| 165.000 | | | | | | | | | | -.1042 | -.2493 | -.0845 | -.0950 | -.1127 | |
| 169.000 | | | | | | | | 1.0062 | | | | | | | |
| 174.000 | | | | | | | 1.0773 | | | | | | | | |
| 180.000 | 1.4288 | .8214 | .6401 | .5492 | .4824 | .4327 | | 1.0278 | | -.1907 | -.2248 | -.1183 | -.0835 | -.0958 | |
| 305.000 | | | .8655 | .6203 | .5164 | .4232 | | .1632 | | .0855 | | | | | |
| 320.000 | | | .7531 | .4504 | .3605 | .5893 | | -.0179 | | -.2149 | .0742 | -.1760 | .0334 | -.1415 | -.0454 |
| 340.000 | | | .6652 | .3160 | .2606 | .8040 | | -.2920 | | -.0855 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0430 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0710 | .2029 | .4014 | .2957 | -.1566 | -.1823 | -.1569 | | -.1229 | -.1229 |
| 40.000 | -.1111 | .0765 | .4245 | .2567 | -.2756 | -.1433 | -.1727 | | -.1290 | -.1332 |
| 70.000 | -.3018 | -.0883 | -.0006 | .1909 | -.1113 | .0410 | -.0721 | | | |
| 90.000 | .0037 | -.0451 | .0657 | .2024 | .0674 | .0104 | -.0279 | | | |
| 105.000 | | | .0000 | .1562 | -.0143 | -.0472 | -.0559 | | | |
| 110.000 | | | | | | | | -.1594 | | |
| 120.000 | -.0314 | -.0014 | .1923 | .0352 | .0300 | -.1107 | -.2142 | -.1526 | | |
| 135.000 | | | .2466 | .2544 | .1071 | .0165 | -.0302 | | | |
| 150.000 | -.0500 | -.0258 | .2580 | .2847 | .1341 | .0594 | .0130 | | | |
| 165.000 | -.0766 | | .2570 | | .2691 | .1093 | -.1474 | | | |
| 180.000 | .0857 | -.0369 | .2642 | .3078 | | | | | | |
| 320.000 | .0603 | .2226 | .3286 | -.0436 | -.1941 | -.1685 | -.2675 | | | |

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ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET835)

ALPHAO( 21) = -4.139 BETAO ( 5) = 6.823

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3847 | .9862 | .5528 | .2591 | .1789 | 1.0498 | | -.1044 | | -.1274 | -.2054 | -.1344 | .0773 | .0123 | -.1654 |
| 2..000 | | | .4778 | .1964 | .1977 | .5988 | | -.1809 | | -.2623 | | | | | |
| 40.000 | | | .4321 | .1849 | .1773 | .3615 | | -.2301 | | -.2034 | .0000 | .0000 | -.0461 | -.2120 | -.1065 |
| 55.000 | | | .4327 | .1958 | .1566 | .2762 | | .0224 | | -.0753 | | | | | |
| 70.000 | | | .4531 | .2060 | .1512 | .2209 | | .1771 | | .0000 | -.2732 | -.2980 | -.1839 | -.0522 | |
| 90.000 | | .4905 | .4883 | .2550 | .1659 | .1766 | | .2612 | | .0000 | -.2514 | -.2936 | -.2404 | -.0501 | |
| 120.000 | | | .5207 | .3593 | .2310 | .2228 | | .4147 | | .0185 | -.1993 | -.3731 | -.2474 | -.1609 | |
| 140.000 | | | | | | | | | | -.1485 | | | | | |
| 150.000 | | | .5515 | .4567 | .3621 | .3141 | | | | -.1585 | -.2655 | -.1131 | -.1361 | -.1507 | |
| 151.000 | | | | | | | | | .5182 | | | | | | |
| 156.000 | | | | | | | | .8390 | | | | | | | |
| 162.000 | | | | | | | | | .6470 | | | | | | |
| 165.000 | | | | | | | | | | -.1430 | -.2540 | -.1080 | -.1045 | -.1241 | |
| 169.000 | | | | | | | | .9748 | | | | | | | |
| 174.000 | | | | | | | 1.0034 | | | | | | | | |
| 180.000 | 1.3847 | .7874 | .6160 | .5194 | .4547 | .4098 | | .9728 | | -.195. | -.2099 | -.1303 | -.0917 | -.0948 | |
| 305.000 | | | .9468 | .6976 | .5759 | .4035 | | .2037 | | .1249 | | | | | |
| 320.000 | | | .7969 | .4882 | .3726 | .5749 | | .0227 | | -.1620 | .1307 | -.1342 | .0579 | -.1328 | .0021 |
| 340.000 | | | .6744 | .3227 | .2326 | .8158 | | -.3192 | | -.0466 | | | | | |

| X/ B | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0405 | .2210 | .4090 | .3693 | -.1763 | -.1916 | -.1700 | | -.1313 | -.1310 |
| 40.000 | -.0990 | .0453 | .4886 | .3199 | -.2804 | -.1554 | -.1732 | | -.1388 | -.1427 |
| 70.000 | .0710 | -.0210 | .0094 | .1848 | .5926 | .0124 | -.1087 | | | |
| 90.000 | .0678 | .0174 | .0938 | .1994 | .0417 | -.0159 | -.0603 | | | |
| 105.000 | | | .0000 | .2062 | -.0286 | -.0666 | -.0824 | | | |
| 110.000 | | | | | | | | -.1875 | | |
| 120.000 | .0297 | .0459 | .2260 | .0381 | -.0263 | -.1573 | -.2608 | -.1687 | | |
| 135.000 | | | .2449 | .2429 | .0645 | -.0347 | -.0856 | | | |
| 150.000 | -.0769 | .0381 | .2621 | .2673 | .1357 | .0163 | -.0460 | | | |
| 165.000 | -.1358 | | .2680 | | .2650 | .1135 | -.1599 | | | |
| 180.000 | -.1137 | -.0661 | .2767 | .2813 | | | | | | |
| 320.000 | .1132 | .2576 | .3349 | -.0656 | -.2134 | -.1914 | -.2972 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB35)

ALPHAO( 3) = -2.110 BETAO ( 1) = -5.871

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3541 | 1.0332 | .5671 | .2508 | .1890 | 1.0327 | | -.0652 | | -.1630 | -.0631 | -.1551 | .0262 | -.1009 | -.0293 |
| 20.000 | | | .6647 | .3559 | .1854 | .7994 | | -.2634 | | -.0819 | | | | | |
| 40.000 | | | .8515 | .5092 | .3361 | .5872 | | .0208 | | -.2065 | .0000 | .0000 | .1057 | -.0663 | .0569 |
| 55.000 | | | .9289 | .6645 | .5047 | .3711 | | .2328 | | .0935 | | | | | |
| 70.000 | | | .9328 | .6807 | .5105 | .3570 | | .2699 | | .0000 | -.1198 | -.1101 | -.0168 | -.0091 | |
| 90.000 | | 1.0527 | .8954 | .6597 | .4952 | .3801 | | .3451 | | .0000 | -.0806 | -.1202 | -.1045 | -.0005 | |
| 120.000 | | | .8160 | .6238 | .4840 | .4368 | | .6272 | | .2747 | -.0190 | -.2331 | -.1693 | -.0326 | |
| 140.000 | | | | | | | | | | .2485 | | | | | |
| 150.000 | | | .7011 | .5200 | .4465 | .4179 | | | | .0542 | -.2643 | -.2091 | -.1295 | -.0634 | |
| 151.000 | | | | | | | | | .8057 | | | | | | |
| 156.000 | | | | | | | | 1.0195 | | | | | | | |
| 162.000 | | | | | | | | | .8441 | | | | | | |
| 165.000 | | | | | | | | | | -.1114 | -.2316 | -.1664 | -.1179 | -.0935 | |
| 169.000 | | | | | | | | 1.0700 | | | | | | | |
| 174.000 | | | | | | | 1.0625 | | | | | | | | |
| 180.000 | 1.3541 | .8349 | .5674 | .4676 | .4109 | .3769 | | .9465 | | -.1995 | -.2637 | -.1609 | -.1192 | -.1246 | |
| 305.000 | | | .4318 | .1643 | .2019 | .3051 | | -.0495 | | -.1367 | | | | | |
| 320.000 | | | .4796 | .1509 | .2048 | .3965 | | -.2759 | | -.2744 | -.1127 | -.1613 | -.1234 | .0349 | .1171 |
| 340.000 | | | .5499 | .1789 | .1843 | .6526 | | -.0799 | | -.3213 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0392 | .3461 | .6136 | .3516 | -.1902 | -.1827 | -.1246 | | -.1141 | -.1171 |
| 40.000 | .0965 | .1814 | .3895 | -.0559 | -.2391 | -.1958 | -.3133 | | -.1452 | -.0919 |
| 70.000 | .0310 | -.0873 | -.0877 | -.0762 | .8032 | .0454 | -.0742 | | | |
| 90.000 | .0470 | -.0463 | -.0519 | .1403 | .0434 | -.0097 | -.0281 | | | |
| 105.000 | | | .0000 | .2012 | .0074 | -.0818 | -.0937 | | | |
| 110.000 | | | | | | | | -.1595 | | |
| 120.000 | -.0372 | -.0441 | .1979 | .2081 | .0949 | -.0448 | -.0945 | -.1223 | | |
| 135.000 | | | .2443 | .2497 | .0860 | -.0091 | .0648 | | | |
| 150.000 | -.0745 | -.0588 | .2447 | .2575 | .0694 | .2016 | .1106 | | | |
| 165.000 | -.0978 | | .2375 | | .4693 | .3455 | -.1131 | | | |
| 180.000 | -.1237 | -.0950 | .2372 | .2611 | | | | | | |
| 320.000 | -.1201 | .3595 | .5779 | .4169 | -.1601 | -.1193 | -.1530 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB35)

ALPHAO( 3) = -2.109 BETAO ( 2) = -1.724

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3949 | 1.1454 | .5673 | .1975 | .1613 | .8986 | | -.1232 | | -.2156 | .0344 | -.0703 | .0997 | -.0958 | -.1418 |
| 20.000 | | | .6165 | .2623 | .1495 | .7406 | | -.2852 | | -.1240 | | | | | |
| 40.000 | | | .7432 | .3745 | .2474 | .5298 | | -.0492 | | -.2725 | .0000 | .0000 | .0494 | -.1021 | .0106 |
| 55.000 | | | .7787 | .5047 | .3974 | .3028 | | .1466 | | .0329 | | | | | |
| 70.000 | | | .7584 | .5165 | .3983 | .2710 | | .2095 | | .0000 | -.1776 | -.1712 | -.1477 | -.0439 | |
| 90.000 | | .8543 | .7384 | .5292 | .3945 | .2974 | | .3012 | | .0000 | -.1417 | -.1890 | -.1852 | -.0386 | |
| 120.000 | | | .7133 | .5489 | .4224 | .3909 | | .5678 | | .1909 | -.0948 | -.2922 | -.1766 | -.0414 | |
| 140.000 | | | | | | | | | | .1415 | | | | | |
| 150.000 | | | .6565 | .5174 | .4380 | .4081 | | | | -.0530 | -.2634 | -.1795 | -.1117 | -.1093 | |
| 151.000 | | | | | | | | | .7401 | | | | | | |
| 156.000 | | | | | | | | .9774 | | | | | | | |
| 162.000 | | | | | | | | | .7940 | | | | | | |
| 165.000 | | | | | | | | | | -.1054 | -.2496 | -.1585 | -.1076 | -.1067 | |
| 169.000 | | | | | | | | 1.0555 | | | | | | | |
| 174.000 | | | | | | | 1.0602 | | | | | | | | |
| 180.000 | 1.3949 | .8187 | .5873 | .5057 | .4446 | .4020 | | 1.0104 | | -.2239 | -.2557 | -.1114 | -.1047 | -.1074 | |
| 305.000 | | | .5063 | .3116 | .2675 | .3346 | | .0240 | | -.0723 | | | | | |
| 320.000 | | | .6105 | .2252 | .1547 | .4456 | | -.1759 | | -.1653 | -.0433 | -.1397 | -.0569 | .0352 | -.0141 |
| 340.000 | | | .6086 | .1727 | .1365 | .6262 | | -.1475 | | -.1725 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0560 | .2700 | .4725 | .3102 | -.1633 | -.1854 | -.1551 | | -.1199 | -.1176 |
| 40.000 | .0918 | .1568 | .3268 | -.0659 | -.2111 | -.2397 | -.2907 | | -.1082 | -.1092 |
| 70.000 | -.0031 | -.0999 | -.1050 | .0539 | .7386 | -.0107 | -.1100 | | | |
| 90.000 | .0086 | -.0622 | -.0389 | .0901 | -.0052 | -.0172 | -.0451 | | | |
| 105.000 | | | .0000 | .1366 | -.0797 | -.1187 | -.0889 | | | |
| 110.000 | | | | | | | | -.1642 | | |
| 120.000 | -.0229 | -.0135 | .2296 | .1918 | .0638 | -.0853 | -.1447 | -.1580 | | |
| 135.000 | | | .2651 | .2987 | .1106 | .0100 | .0094 | | | |
| 150.000 | -.0499 | -.0099 | .2544 | .3093 | .1476 | .1373 | .0623 | | | |
| 165.000 | -.0525 | | .2634 | | .3859 | .2375 | -.1223 | | | |
| 180.000 | -.0502 | -.0181 | .2564 | .3968 | | | | | | |
| 320.000 | -.1402 | .2807 | .4377 | .3120 | -.1799 | -.1317 | -.1658 | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB35)

ALPHAO( 3) = -2.081 BETAO ( 3) = 2.471

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4160 | 1.1074 | .5873 | .2170 | .1854 | 1.0507 | | -.1212 | | -.1930 | -.0616 | -.0771 | .1580 | .0451 | -.0487 |
| 20.000 | | | .5726 | .2230 | .1804 | .6752 | | -.1752 | | -.2882 | | | | | |
| 40.000 | | | .6120 | .2790 | .1520 | .4377 | | -.1567 | | -.2381 | .0000 | .0000 | .0379 | -.1689 | -.0967 |
| 55.000 | | | .6163 | .3421 | .2464 | .3044 | | .0643 | | -.0490 | | | | | |
| 70.000 | | | .6057 | .3606 | .2693 | .2227 | | .1584 | | .0000 | -.2328 | -.2553 | -.1965 | -.0540 | |
| 90.000 | | .6798 | .6076 | .3953 | .2793 | .2077 | | .2706 | | .0000 | -.2094 | -.2533 | -.2520 | -.0518 | |
| 120.000 | | | .6167 | .4576 | .3429 | .3056 | | .4814 | | .1013 | -.1566 | -.3540 | -.2078 | -.1140 | |
| 140.000 | | | | | | | | | | -.0436 | | | | | |
| 150.000 | | | .6079 | .4920 | .4101 | .3591 | | | | -.1312 | -.2613 | -.1707 | -.1428 | -.1428 | |
| 151.000 | | | | | | | | | .6448 | | | | | | |
| 155.000 | | | | | | | | .9100 | | | | | | | |
| 162.000 | | | | | | | | | .7194 | | | | | | |
| 165.000 | | | | | | | | | | -.1129 | -.2619 | -.1108 | -.1187 | -.1258 | |
| 169.000 | | | | | | | | 1.0115 | | | | | | | |
| 174.000 | | | | | | | 1.0244 | | | | | | | | |
| 180.000 | 1.4160 | .7959 | .5998 | .5167 | .4561 | .4014 | | 1.0261 | | -.2240 | -.2477 | -.1215 | -.1118 | -.1162 | |
| 305.000 | | | .7731 | .5264 | .4471 | .3807 | | .1010 | | .0152 | | | | | |
| 320.000 | | | .7360 | .3869 | .3119 | .5550 | | -.0653 | | -.2531 | .0070 | -.1924 | .0072 | -.0865 | -.0529 |
| 340.000 | | | .6709 | .2492 | .1951 | .7932 | | -.3183 | | -.1199 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1157 | .2138 | .3753 | .2959 | -.1672 | -.1749 | -.1493 | | -.1190 | -.1174 |
| 40.000 | -.1169 | .1488 | .4122 | .2148 | -.2726 | -.1672 | -.1790 | | -.1155 | -.1283 |
| 70.000 | -.0199 | -.1054 | -.0533 | .0776 | .6739 | -.0265 | -.1240 | | | |
| 90.000 | -.0065 | -.0622 | .0594 | .1103 | -.0393 | -.0450 | -.0674 | | | |
| 105.000 | | | .0000 | .1187 | -.1204 | -.1322 | -.1116 | | | |
| 110.000 | | | | | | | | -.1841 | | |
| 120.000 | -.0298 | -.0014 | .2013 | .0536 | .0078 | -.1426 | -.2257 | -.1832 | | |
| 135.000 | | | .2593 | .2700 | .0588 | -.0291 | -.0626 | | | |
| 150.000 | -.0513 | -.0071 | .2747 | .2928 | .1145 | .0467 | -.0208 | | | |
| 165.000 | -.0583 | | .2712 | | .3024 | .1274 | -.1451 | | | |
| 180.000 | -.0682 | -.0200 | .2695 | .3667 | | | | | | |
| 320.000 | .0697 | .2391 | .3074 | -.0002 | -.1979 | -.1813 | -.2585 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET835)

ALPHAO( 3) = -2.052 BETAO ( 4) = 6.607

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3817 | 1.0170 | .5626 | .2263 | .1262 | 1.0001 | | -.1259 | | -.1484 | -.2291 | -.1696 | .0054 | .0111 | -.1547 |
| 20.000 | | | .4818 | .1682 | .1433 | .5850 | | -.2016 | | -.2823 | | | | | |
| 40.000 | | | .4221 | .1619 | .1294 | .3478 | | -.2487 | | -.2282 | .0000 | .0000 | -.0412 | -.2033 | .0090 |
| 55.000 | | | .4089 | .1761 | .1111 | .2509 | | -.0025 | | -.1054 | | | | | |
| 70.000 | | | .4316 | .1824 | .1265 | .1665 | | .1272 | | .0000 | -.2839 | -.3156 | -.2264 | -.0731 | |
| 90.000 | | .4553 | .4679 | .2367 | .1395 | .1519 | | .2352 | | .0000 | -.2579 | -.3043 | -.2840 | -.0792 | |
| 120.000 | | | .4894 | .3291 | .2044 | .1991 | | .3984 | | .0159 | -.2141 | -.3825 | -.2584 | -.2004 | |
| 140.000 | | | | | | | | | | -.1587 | | | | | |
| 150.000 | | | .5042 | .4146 | .3215 | .2699 | | | | -.1769 | -.2858 | -.1418 | -.1618 | -.1719 | |
| 151.000 | | | | | | | | | .4995 | | | | | | |
| 158.000 | | | | | | | | .8263 | | | | | | | |
| 162.000 | | | | | | | | | .6195 | | | | | | |
| 165.000 | | | | | | | | | | -.1676 | -.2791 | -.1377 | -.1330 | -.1463 | |
| 169.000 | | | | | | | | .9425 | | | | | | | |
| 174.000 | | | | | | | .9824 | | | | | | | | |
| 180.000 | 1.3817 | .7234 | .5573 | .4740 | .4053 | .3563 | | .9277 | | -.2173 | -.2461 | -.1615 | -.1219 | -.1194 | |
| 305.000 | | | .9466 | .6917 | .5635 | .3753 | | .1765 | | .0757 | | | | | |
| 320.000 | | | .8251 | .4888 | .3519 | .4705 | | .0079 | | -.1820 | .0971 | -.0966 | .0389 | -.1343 | .0223 |
| 340.000 | | | .6917 | .2973 | .1874 | .8046 | | -.3257 | | -.0783 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9800 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0841 | .2588 | .4267 | .3791 | -.1788 | -.1908 | -.1672 | | -.1273 | -.1331 |
| 40.000 | -.1185 | .1106 | .5160 | .3681 | -.2925 | -.1588 | -.1727 | | -.1363 | -.1428 |
| 70.000 | .0592 | -.0359 | -.0227 | .1414 | .5919 | -.0043 | -.1265 | | | |
| 90.000 | .0618 | .0064 | .0529 | .1754 | .0158 | -.0370 | -.0803 | | | |
| 105.000 | | | .0000 | .2282 | -.0600 | -.0836 | -.1006 | | | |
| 110.000 | | | | | | | | -.2011 | | |
| 120.000 | .0139 | .0438 | .2104 | .1611 | -.0079 | -.1458 | -.2518 | -.1739 | | |
| 135.000 | | | .2088 | .2193 | .0579 | -.0405 | -.0945 | | | |
| 150.000 | -.0518 | .0928 | .2162 | .2293 | .1113 | -.0037 | -.0635 | | | |
| 165.000 | -.1612 | | .2272 | | .2067 | .0774 | -.1675 | | | |
| 180.000 | -.1418 | -.0204 | .2382 | .2170 | | | | | | |
| 320.000 | .1248 | .2881 | .3470 | -.0629 | -.2096 | -.1969 | -.3054 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB35)

ALPHAO( 4) = .004 BETAO ( 1) = -5.872

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3043 | 1.0810 | .5821 | .2298 | .1417 | .0827 | | -.0809 | | -.1724 | -.0827 | -.1693 | -.0901 | -.0901 | -.0322 |
| 20.000 | | | .6951 | .3452 | .1420 | .7850 | | -.2908 | | -.1024 | | | | | |
| 40.000 | | | .8732 | .5203 | .3269 | .4529 | | .0054 | | -.2185 | .0000 | .0000 | .1378 | -.0660 | .0638 |
| 55.000 | | | .9310 | .6684 | .5067 | .3186 | | .1915 | | .0523 | | | | | |
| 70.000 | | | .9162 | .6703 | .5010 | .3208 | | .2279 | | .0000 | -.1382 | -.0577 | -.0590 | -.0299 | |
| 90.000 | | 1.0204 | .8707 | .6538 | .4807 | .3493 | | .2671 | | .0000 | -.0968 | -.1294 | -.1040 | -.0289 | |
| 120.000 | | | .7633 | .5821 | .4339 | .3883 | | .5873 | | .2526 | -.0372 | -.2454 | -.1789 | -.0860 | |
| 140.000 | | | | | | | | | | .2278 | | | | | |
| 150.000 | | | .6427 | .4692 | .3943 | .3674 | | | | .0552 | -.2899 | -.2404 | -.1624 | -.1040 | |
| 151.000 | | | | | | | | | .7695 | | | | | | |
| 156.000 | | | | | | | | .9794 | | | | | | | |
| 162.000 | | | | | | | | | .8112 | | | | | | |
| 165.000 | | | | | | | | | | -.1405 | -.2591 | -.2001 | -.1478 | -.1199 | |
| 169.000 | | | | | | | | 1.0240 | | | | | | | |
| 174.000 | | | | | | | .9627 | | | | | | | | |
| 180.000 | 1.3043 | .7706 | .5116 | .4210 | .3617 | .3294 | | .9177 | | -.2219 | -.2889 | -.1868 | -.1472 | -.1425 | |
| 305.000 | | | .4163 | .1398 | .1552 | .2863 | | -.0726 | | -.1783 | | | | | |
| 320.000 | | | .4921 | .1226 | .1520 | .3743 | | -.2821 | | -.2899 | -.1437 | -.1884 | -.1747 | .0518 | .0913 |
| 340.000 | | | .5631 | .1508 | .1403 | .6371 | | -.0840 | | -.3178 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0900 | .3844 | .6577 | .3776 | -.1949 | -.1480 | -.1581 | | -.0923 | -.1064 |
| 40.000 | .1471 | .2053 | .4018 | -.0038 | -.2467 | -.1541 | -.2920 | | -.1400 | -.0551 |
| 70.000 | .0127 | -.1063 | -.1112 | -.1394 | .7868 | .0204 | -.0892 | | | |
| 90.000 | .0344 | -.0652 | -.0804 | .0900 | .0372 | -.0346 | -.0591 | | | |
| 105.000 | | | .0000 | .1852 | .0023 | -.0936 | -.1222 | | | |
| 110.000 | | | | | | | | -.1865 | | |
| 120.000 | -.0804 | -.0969 | .1347 | .1948 | .0851 | -.0578 | -.1219 | -.1445 | | |
| 135.000 | | | .2292 | .2145 | .0557 | -.0630 | .0308 | | | |
| 150.000 | -.1040 | -.0908 | .2322 | .2093 | -.0317 | .1637 | .0890 | | | |
| 165.000 | -.1238 | | .2179 | | .4007 | .3032 | -.1199 | | | |
| 180.000 | -.1458 | .0543 | .2040 | .1932 | | | | | | |
| 320.000 | -.1063 | .4086 | .6379 | .4874 | -.1878 | -.1128 | -.1500 | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB35)

ALPHAO( 4) = .007 BETAO ( 2) = -3.836

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4117 | 1.1388 | .5632 | .1861 | .1488 | .9845 | | -.0777 | | -.1962 | .0080 | -.1655 | -.0093 | -.0872 | -.0712 |
| 20.000 | | | .6538 | .2880 | .1266 | .7864 | | -.3090 | | -.1146 | | | | | |
| 40.000 | | | .8302 | .4468 | .2851 | .5469 | | -.0236 | | -.2525 | .0000 | .0000 | .0842 | -.0254 | -.0053 |
| 55.000 | | | .8630 | .5955 | .4566 | .2947 | | .1575 | | .0197 | | | | | |
| 70.000 | | | .8286 | .5920 | .4423 | .2811 | | .2070 | | .0000 | -.1665 | -.1451 | -.1141 | -.0416 | |
| 90.000 | | .9024 | .7810 | .5831 | .4294 | .3134 | | .2537 | | .0000 | -.1224 | -.1655 | -.1423 | -.0356 | |
| 120.000 | | | .7160 | .5474 | .4142 | .3756 | | .5672 | | .2174 | -.0716 | -.2745 | -.2051 | -.0790 | |
| 140.000 | | | | | | | | | | .1802 | | | | | |
| 150.000 | | | .6232 | .4705 | .3993 | .3705 | | | | -.0169 | -.2870 | -.2368 | -.1537 | -.1048 | |
| 151.000 | | | | | | | | | .7429 | | | | | | |
| 156.000 | | | | | | | | .9643 | | | | | | | |
| 162.000 | | | | | | | | | .7883 | | | | | | |
| 165.000 | | | | | | | | | | -.1301 | -.2547 | -.1918 | -.1436 | -.1187 | |
| 169.000 | | | | | | | | 1.0150 | | | | | | | |
| 174.000 | | | | | | | 1.0253 | | | | | | | | |
| 180.000 | 1.4117 | .7485 | .5216 | .4420 | .3857 | .3459 | | .9359 | | -.2259 | -.2825 | -.1664 | -.1417 | -.1339 | |
| 305.000 | | | .5020 | .2301 | .1756 | .3010 | | -.0334 | | -.1464 | | | | | |
| 320.000 | | | .5480 | .1744 | .1437 | .4151 | | -.2348 | | -.2470 | -.0946 | -.1750 | -.1094 | .0606 | .1122 |
| 340.000 | | | .5809 | .1390 | .1307 | .6461 | | -.1089 | | -.2940 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0292 | .3309 | .5868 | .3838 | -.1356 | -.1757 | -.1380 | | -.0973 | -.0976 |
| 40.000 | .0738 | .1723 | .3525 | -.0014 | -.2019 | -.2462 | -.3012 | | -.1012 | -.0789 |
| 70.000 | -.0069 | -.1113 | -.1248 | -.0487 | .7931 | -.0016 | -.1022 | | | |
| 90.000 | .0115 | -.0738 | -.0824 | .1019 | .0029 | -.0521 | -.0684 | | | |
| 105.000 | | | .0000 | .1540 | -.0320 | -.1175 | -.1213 | | | |
| 110.000 | | | | | | | | -.1777 | | |
| 120.000 | -.0525 | -.0646 | .1989 | .1804 | .0641 | -.0800 | -.1190 | -.1497 | | |
| 135.000 | | | .2147 | .2325 | .0760 | -.0313 | .0103 | | | |
| 150.000 | -.0835 | -.0555 | .2189 | .2441 | .0676 | .1292 | .0642 | | | |
| 165.000 | -.0967 | | .2170 | | .1360 | .2429 | -.1206 | | | |
| 180.000 | -.0945 | -.0452 | .2154 | .2628 | | | | | | |
| 320.000 | -.0324 | .3453 | .5661 | .3953 | -.2074 | -.1029 | -.1584 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB35)

ALPHAO( 4) = .019 BETAO ( 3) = .354

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5165 | 1.1451 | .5500 | .1412 | .1158 | .8335 | | -.1573 | | -.1693 | -.0167 | -.1294 | -.0268 | .0446 | .0566 |
| 20.000 | | | .5812 | .1805 | .1161 | .5649 | | -.2098 | | -.1825 | | | | | |
| 40.000 | | | .6771 | .2845 | .1323 | .4001 | | -.1232 | | -.3144 | .0000 | .0000 | .0539 | -.1103 | -.0374 |
| 55.000 | | | .6935 | .3888 | .2845 | .2252 | | .0782 | | -.0508 | | | | | |
| 70.000 | | | .6761 | .4087 | .3067 | .1889 | | .1435 | | .0000 | -.2208 | -.2323 | -.1704 | -.0872 | |
| 90.000 | | .7840 | .6692 | .4338 | .3133 | .2180 | | .2116 | | .0000 | -.1870 | -.2295 | -.2115 | -.0535 | |
| 120.000 | | | .6244 | .4547 | .3426 | .3100 | | .5090 | | .1292 | -.1470 | -.3299 | -.2172 | -.0961 | |
| 140.000 | | | | | | | | | | .0373 | | | | | |
| 150.000 | | | .5781 | .4506 | .3824 | .3391 | | | | -.1179 | -.2873 | -.2020 | -.1520 | -.1385 | |
| 151.000 | | | | | | | | | .6645 | | | | | | |
| 156.000 | | | | | | | | .9155 | | | | | | | |
| 162.000 | | | | | | | | | .7275 | | | | | | |
| 165.000 | | | | | | | | | | -.1336 | -.2796 | -.1726 | -.1400 | -.1366 | |
| 169.000 | | | | | | | | 1.0063 | | | | | | | |
| 174.000 | | | | | | | 1.0252 | | | | | | | | |
| 180.000 | 1.5165 | .7253 | .5342 | .4598 | .4084 | .3581 | | .9871 | | -.2691 | -.2793 | -.1217 | -.1337 | -.1340 | |
| 305.000 | | | .6664 | .3913 | .3625 | .3068 | | .0402 | | -.0665 | | | | | |
| 320.000 | | | .6430 | .2575 | .2078 | .4761 | | -.1374 | | -.2956 | -.0451 | -.1530 | -.0407 | .0460 | -.0028 |
| 340.000 | | | .6072 | .1485 | .1262 | .7035 | | -.3315 | | -.1291 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1083 | .2611 | .3818 | .2848 | -.1779 | -.1785 | -.1622 | | -.1354 | -.1357 |
| 40.000 | .0896 | .2228 | .3275 | .0954 | -.2505 | -.2671 | -.2736 | | -.1186 | -.1231 |
| 70.000 | -.0235 | -.1291 | -.1174 | .0403 | .5560 | -.0320 | -.1274 | | | |
| 90.000 | -.0080 | -.0797 | .0371 | .0866 | -.0537 | -.0524 | -.0770 | | | |
| 105.000 | | | .0000 | .0947 | -.1100 | -.1394 | -.1190 | | | |
| 110.000 | | | | | | | | -.1916 | | |
| 120.000 | -.0342 | -.0235 | .1969 | .1325 | .0563 | -.1080 | -.1823 | -.1865 | | |
| 135.000 | | | .1959 | .2262 | .0909 | -.0108 | -.0412 | | | |
| 150.000 | -.0574 | -.0102 | .2311 | .2756 | .0989 | .0692 | .0140 | | | |
| 165.000 | -.0571 | | .2476 | | .3121 | .1387 | -.1445 | | | |
| 180.000 | -.0613 | -.0170 | .2529 | .3709 | | | | | | |
| 320.000 | .0334 | .2884 | .4393 | .1926 | -.2316 | -.1810 | -.2378 | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB35)

ALPHAO( 4) = .011 BETAO ( 4) = 4.521

SECTION ( 1:ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4140 | 1.0921 | .5856 | .1984 | .1271 | 1.0030 | | -.1369 | | -.1798 | -.1195 | -.2039 | -.1129 | .0474 | -.0933 |
| 20.000 | | | .5358 | .1637 | .1340 | .6224 | | -.1962 | | -.3113 | | | | | |
| 40.000 | | | .5087 | .2015 | .1076 | .3832 | | -.2085 | | -.2468 | .0000 | .0000 | .0081 | -.1737 | -.0988 |
| 55.000 | | | .4885 | .2428 | .1665 | .2665 | | .0048 | | -.1121 | | | | | |
| 70.000 | | | .4869 | .2592 | .1870 | .1743 | | .0975 | | .0000 | -.2729 | -.3029 | -.2393 | -.0790 | |
| 90.000 | | .5468 | .5137 | .2949 | .2006 | .1654 | | .2135 | | .0000 | -.2448 | -.2960 | -.2818 | -.0850 | |
| 120.000 | | | .5162 | .3661 | .2542 | .2302 | | .4314 | | .0520 | -.2074 | -.3822 | -.2466 | -.1854 | |
| 140.000 | | | | | | | | | | -.1026 | | | | | |
| 150.000 | | | .5134 | .4150 | .3354 | .2805 | | | | -.1691 | -.2959 | -.1861 | -.1747 | -.1764 | |
| 151.000 | | | | | | | | | .5522 | | | | | | |
| 156.000 | | | | | | | | .8083 | | | | | | | |
| 162.000 | | | | | | | | | .6512 | | | | | | |
| 165.000 | | | | | | | | | | -.1502 | -.2965 | -.1440 | -.1519 | -.1538 | |
| 169.000 | | | | | | | | .9552 | | | | | | | |
| 174.000 | | | | | | | .8927 | | | | | | | | |
| 180.000 | 1.4140 | .6906 | .5292 | .4513 | .3857 | .3320 | | .9678 | | -.2326 | -.2751 | -.1785 | -.1446 | -.1379 | |
| 305.000 | | | .8612 | .6049 | .4985 | .3253 | | .1189 | | .0098 | | | | | |
| 320.000 | | | .8045 | .4327 | .3130 | .5248 | | -.0353 | | -.2275 | .0491 | -.1626 | -.0910 | -.1690 | -.0271 |
| 340.000 | | | .6957 | .2608 | .1512 | .7741 | | -.3454 | | -.1132 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1868 | .2756 | .4465 | .3676 | -.1631 | -.1773 | -.1473 | | -.1126 | -.1146 |
| 40.000 | -.0830 | .2035 | .5196 | .3712 | -.2805 | -.1608 | -.1783 | | -.1142 | -.1274 |
| 70.000 | -.0226 | -.1075 | .0471 | .1471 | .6253 | .0061 | -.1076 | | | |
| 90.000 | -.0106 | -.0604 | .1141 | .1555 | .0368 | -.0120 | -.0582 | | | |
| 105.000 | | | .0000 | .1811 | -.0334 | -.0677 | -.0847 | | | |
| 110.000 | | | | | | | | -.1886 | | |
| 120.000 | -.0365 | .0082 | .1995 | .0996 | .0524 | -.1066 | -.1954 | -.1560 | | |
| 135.000 | | | .2228 | .2272 | .1090 | -.0072 | -.0547 | | | |
| 150.000 | -.0830 | -.0073 | .2241 | .2227 | .1300 | .0396 | -.0201 | | | |
| 165.000 | -.1108 | | .2215 | | .1946 | .0915 | -.1508 | | | |
| 180.000 | -.1357 | -.0618 | .2186 | .2385 | | | | | | |
| 320.000 | .1257 | .2926 | .3612 | -.0001 | -.1822 | -.1783 | -.2812 | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET835)

ALPHAO( 4) = .022 BETAO ( 5) = 6.587

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3896 | 1.0395 | .5651 | .1883 | .0788 | .9367 | | -.1452 | | -.1652 | -.2212 | -.1844 | -.2056 | .0309 | -.1069 |
| 20.000 | | | .4854 | .1246 | .0999 | .5646 | | -.2152 | | -.2977 | | | | | |
| 40.000 | | | .4179 | .1370 | .0864 | .3232 | | -.2620 | | -.2499 | .0000 | .0000 | -.0492 | -.0945 | .0479 |
| 55.000 | | | .3924 | .1499 | .0884 | .2212 | | -.0240 | | -.1302 | | | | | |
| 70.000 | | | .4110 | .1658 | .1180 | .1315 | | .0832 | | .0000 | -.2895 | -.3250 | -.2550 | -.0891 | |
| 90.000 | | .4387 | .4431 | .2089 | .1316 | .1309 | | .2093 | | .0000 | -.2646 | -.3126 | -.2959 | -.0923 | |
| 120.000 | | | .4602 | .2991 | .1839 | .1757 | | .3915 | | .0108 | -.2250 | -.3956 | -.2677 | -.2167 | |
| 140.000 | | | | | | | | | | -.1659 | | | | | |
| 150.000 | | | .4630 | .3707 | .2853 | .2408 | | | | -.1930 | -.3023 | -.1714 | -.1863 | -.1857 | |
| 151.000 | | | | | | | | | .4798 | | | | | | |
| 158.000 | | | | | | | | .7948 | | | | | | | |
| 162.000 | | | | | | | | | .5867 | | | | | | |
| 165.000 | | | | | | | | | | -.1873 | -.2991 | -.1641 | -.1607 | -.1599 | |
| 169.000 | | | | | | | | .8948 | | | | | | | |
| 174.000 | | | | | | | .9582 | | | | | | | | |
| 180.000 | 1.3896 | .6628 | .5021 | .4245 | .3511 | .3087 | | .8888 | | -.2365 | -.2716 | -.1923 | -.1490 | -.1402 | |
| 305.000 | | | .9436 | .6925 | .5538 | .3419 | | .1549 | | .0399 | | | | | |
| 320.000 | | | .8512 | .4778 | .3296 | .4073 | | -.0031 | | -.1930 | .1082 | -.1211 | .0033 | -.1257 | .0286 |
| 340.000 | | | .7010 | .2693 | .1403 | .7923 | | -.3280 | | -.0959 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1583 | .3074 | .4588 | .3728 | -.1735 | -.1864 | -.1595 | | -.1239 | -.1259 |
| 40.000 | -.1069 | .1924 | .5641 | .4542 | -.2847 | -.1579 | -.1737 | | -.1289 | -.1394 |
| 70.000 | .0395 | -.0453 | -.0384 | .0956 | .5673 | -.0227 | -.1424 | | | |
| 90.000 | .0611 | .0124 | .0251 | .1554 | -.0007 | -.0586 | -.0917 | | | |
| 105.000 | | | .0000 | .2610 | -.1081 | -.1195 | -.1204 | | | |
| 110.000 | | | | | | | | -.1943 | | |
| 120.000 | -.0163 | .0484 | .1741 | .2352 | -.0046 | -.1243 | -.2146 | -.1898 | | |
| 135.000 | | | .1909 | .2045 | .0720 | -.0337 | -.0965 | | | |
| 150.000 | -.0202 | .1351 | .1712 | .2071 | .1082 | -.0140 | -.0711 | | | |
| 165.000 | -.1144 | | .1622 | | .1438 | .0392 | -.1727 | | | |
| 180.000 | -.1634 | .1131 | .1832 | .1370 | | | | | | |
| 320.000 | .1763 | .3156 | .3739 | -.0519 | -.1971 | -.1930 | -.3043 | | | |

DATE 08 OCT 75 IA81B - PRESSURE SOURCE DATA TABULATION

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET835)

ALPHA0( 5)= 2.000 BETA0 ( 1)= -5.000

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3487 | 1.1370 | .8842 | .1777 | .1848 | .0083 | | -.0882 | | -.1737 | -.0498 | -.1817 | -.1131 | -.0838 | -.0868 |
| 20.000 | | | .8842 | .3028 | .0888 | .7751 | | -.3243 | | -.0805 | | | | | |
| 40.000 | | | .9212 | .4953 | .3056 | .3350 | | -.0018 | | -.1724 | .0000 | .0000 | .0387 | -.0589 | .0857 |
| 55.000 | | | .9560 | .6764 | .5063 | .2585 | | .1716 | | .0503 | | | | | |
| 70.000 | | | .8918 | .6550 | .4871 | .2889 | | .2038 | | .0000 | -.1075 | -.0539 | -.0864 | -.0583 | |
| 90.000 | | .9954 | .8401 | .6266 | .4556 | .3212 | | .2248 | | .0000 | -.1027 | -.1046 | -.1207 | -.0622 | |
| 120.000 | | | .7171 | .5264 | .3814 | .3388 | | .5528 | | .2284 | -.0517 | -.2470 | -.2134 | -.1423 | |
| 140.000 | | | | | | | | | | .2031 | | | | | |
| 150.000 | | | .5852 | .4099 | .3447 | .3121 | | | | .0273 | -.3120 | -.2690 | -.1810 | -.1365 | |
| 151.000 | | | | | | | | | .7287 | | | | | | |
| 156.000 | | | | | | | | .9403 | | | | | | | |
| 162.000 | | | | | | | | | .7613 | | | | | | |
| 165.000 | | | | | | | | | | -.1655 | -.2813 | -.2309 | -.1678 | -.1506 | |
| 169.000 | | | | | | | | .9669 | | | | | | | |
| 174.000 | | | | | | | 1.0074 | | | | | | | | |
| 180.000 | 1.3427 | .7039 | .4569 | .3692 | .3149 | .2814 | | .8517 | | -.2432 | -.3117 | -.2118 | -.1700 | -.1650 | |
| 305.000 | | | .3996 | .1153 | .1209 | .2579 | | -.0865 | | -.2061 | | | | | |
| 320.000 | | | .4685 | .0850 | .1115 | .3460 | | -.2826 | | -.2873 | -.1595 | -.2124 | -.1818 | .0506 | .0964 |
| 340.000 | | | .5444 | .1009 | .0945 | .6118 | | -.0899 | | -.2803 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9800 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1344 | .4333 | .6949 | .4229 | -.1707 | -.1210 | -.1284 | | -.0814 | -.0942 |
| 40.000 | .1842 | .2613 | .4306 | .0216 | -.2317 | -.1544 | -.3053 | | -.1358 | -.0770 |
| 70.000 | -.0042 | -.1179 | -.1298 | -.1648 | .7819 | -.0110 | -.0999 | | | |
| 90.000 | .0163 | -.0750 | -.0999 | .0598 | .0130 | -.0562 | -.0842 | | | |
| 105.000 | | | .0000 | .1465 | -.0091 | -.1153 | -.1387 | | | |
| 110.000 | | | | | | | | -.2066 | | |
| 120.000 | -.1240 | -.1401 | .1612 | .1528 | .0817 | -.0676 | -.1361 | -.1797 | | |
| 135.000 | | | .2074 | .1869 | .0595 | -.0835 | -.0182 | | | |
| 150.000 | -.1307 | -.0167 | .2058 | .1816 | -.1188 | .1117 | .0702 | | | |
| 165.000 | -.1471 | | .1724 | | .3498 | .2657 | -.1256 | | | |
| 180.000 | -.1535 | .1284 | .1606 | .1784 | | | | | | |
| 320.000 | .1082 | .4733 | .6840 | .5491 | -.1855 | -.0990 | -.1360 | | | |

ARC97-019 IA81 LVAP(ALL-HL SEALED) ORB. FUSELAGE (RETB35)

ALPHA0( 5) = 2.063 BETA0 ( 2) = -1.746

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1860 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5190 | 1.1570 | .5490 | .1218 | .0978 | .7618 | | -.1394 | | -.1381 | .0150 | -.0896 | -.1744 | .0408 | -.0105 |
| 20.000 | | | .6036 | .1928 | .0899 | .6465 | | -.3259 | | -.1280 | | | | | |
| 40.000 | | | .7328 | .3445 | .2016 | .4535 | | -.0758 | | -.2778 | .0000 | .0000 | -.0137 | .0367 | .0182 |
| 55.000 | | | .7603 | .4814 | 3710 | .2156 | | .1003 | | -.0404 | | | | | |
| 70.000 | | | .7365 | .4889 | .3723 | .2081 | | .1527 | | .0000 | -.1975 | -.1490 | -.1631 | -.0948 | |
| 90.000 | | .8393 | .7082 | .4905 | .3554 | .2463 | | .1795 | | .0000 | -.1705 | -.1897 | -.1853 | -.0757 | |
| 120.000 | | | .6283 | .4605 | .3398 | .3051 | | .5085 | | .1556 | -.1227 | -.3084 | -.2166 | -.1343 | |
| 140.000 | | | | | | | | | | .1091 | | | | | |
| 150.000 | | | .5481 | .4154 | .3488 | .3132 | | | | -.0883 | -.3085 | -.2435 | -.1687 | -.1373 | |
| 151.000 | | | | | | | | | .6721 | | | | | | |
| 156.000 | | | | | | | | .9073 | | | | | | | |
| 162.000 | | | | | | | | | .7164 | | | | | | |
| 165.000 | | | | | | | | | | -.1528 | -.3006 | -.2147 | -.1653 | -.1377 | |
| 169.000 | | | | | | | | .9591 | | | | | | | |
| 174.000 | | | | | | | 1.0745 | | | | | | | | |
| 180.000 | 1.5190 | .6611 | .4757 | .4051 | .3523 | .3126 | | .9226 | | -.2706 | -.2997 | -.1693 | -.1625 | -.1421 | |
| 305.000 | | | .5684 | .2654 | .2316 | .2788 | | -.0125 | | -.1193 | | | | | |
| 320.000 | | | .5958 | .1712 | .1075 | .3657 | | -.1918 | | -.2084 | -.0744 | -.1850 | -.0885 | .0425 | .0789 |
| 340.000 | | | .5912 | .0996 | .0775 | .5221 | | -.1590 | | -.1471 | | | | | |
| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 | | | | | |
| PHI | | | | | | | | | | | | | | | |
| .000 | .1261 | .3255 | .5044 | .3313 | -.1554 | -.1838 | -.1436 | | -.1022 | -.1019 | | | | | |
| 40.000 | .1277 | .2252 | .3454 | -.0205 | -.1806 | -.2094 | -.3083 | | -.0933 | -.0953 | | | | | |
| 70.000 | -.0265 | -.1332 | -.1439 | -.0644 | .6482 | -.0351 | -.1247 | | | | | | | | |
| 90.000 | -.0137 | -.0875 | -.1057 | .0901 | -.0209 | -.0002 | -.0979 | | | | | | | | |
| 105.000 | | | .0000 | .1525 | -.0594 | -.1554 | -.1551 | | | | | | | | |
| 110.000 | | | | | | | | -.1915 | | | | | | | |
| 120.000 | -.0687 | -.0802 | .1762 | .1710 | .0191 | -.1101 | -.1615 | -.1755 | | | | | | | |
| 135.000 | | | .2174 | .2279 | .0399 | -.0577 | -.0539 | | | | | | | | |
| 150.000 | -.0775 | .0199 | .2104 | .2244 | .0431 | .0562 | .0094 | | | | | | | | |
| 165.000 | -.0760 | | .2053 | | .2419 | .1603 | -.1212 | | | | | | | | |
| 180.000 | -.0705 | .0068 | .2049 | .2515 | | | | | | | | | | | |
| 320.000 | .1118 | .3620 | .4906 | .3919 | -.2181 | -.1247 | -.1682 | | | | | | | | |

ARC97-019 IAB1 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB35)

ALPHAO( 5) = 2.078 BETAO ( 3) = 2.458

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4240 | 1.1819 | .5788 | .1864 | .1248 | 1.0069 | | -.1721 | | -.2147 | -.0643 | -.0998 | -.1363 | .0223 | .0966 |
| 20.000 | | | .5551 | .1661 | .1251 | .8287 | | -.1865 | | -.3057 | | | | | |
| 40.000 | | | .5975 | .2365 | .1097 | .4053 | | -.1784 | | -.3007 | .0000 | .0000 | -.0062 | .0066 | -.0824 |
| 55.000 | | | .5929 | .3173 | .2206 | .2245 | | .0212 | | -.1155 | | | | | |
| 70.000 | | | .5776 | .3276 | .2346 | .1720 | | .0997 | | .0000 | -.2513 | -.2466 | -.2335 | -.1052 | |
| 90.000 | | .6303 | .5760 | .3596 | .2425 | .1726 | | .1578 | | .0000 | -.2175 | -.2701 | -.2497 | -.0905 | |
| 120.000 | | | .5451 | .3977 | .2780 | .2549 | | .4533 | | .0824 | -.1859 | -.3660 | -.2385 | -.1554 | |
| 140.000 | | | | | | | | | | -.0469 | | | | | |
| 150.000 | | | .5126 | .4034 | .3262 | .2877 | | | | -.1559 | -.3069 | -.2291 | -.1886 | -.1649 | |
| 151.000 | | | | | | | | | .5897 | | | | | | |
| 156.000 | | | | | | | | .8413 | | | | | | | |
| 162.000 | | | | | | | | | .6562 | | | | | | |
| 165.000 | | | | | | | | | | -.1553 | -.3028 | -.1745 | -.1726 | -.1553 | |
| 169.000 | | | | | | | | .9303 | | | | | | | |
| 174.000 | | | | | | | 1.0025 | | | | | | | | |
| 180.000 | 1.4240 | .8522 | .4924 | .4200 | .3594 | .3153 | | .9409 | | -.2643 | -.2911 | -.1814 | -.1664 | -.1422 | |
| 305.000 | | | .8035 | .6193 | .4233 | .3031 | | .0590 | | -.0485 | | | | | |
| 320.000 | | | .7840 | .3543 | .2546 | .5177 | | -.0864 | | -.2725 | .0381 | -.2043 | -.0504 | .0620 | -.0505 |
| 340.000 | | | .6723 | .2049 | .1075 | .7598 | | -.3633 | | -.1404 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1561 | .3053 | .4451 | .3385 | -.1445 | -.1646 | -.1382 | | -.1011 | -.1046 |
| 40.000 | .0205 | .3037 | .4915 | .2934 | -.2482 | -.1592 | -.1708 | | -.0057 | -.1101 |
| 70.000 | -.0338 | -.1332 | -.1212 | .0250 | .6359 | -.0619 | -.1500 | | | |
| 90.000 | -.0127 | -.0751 | .0469 | .0542 | -.0734 | -.0820 | -.1028 | | | |
| 105.000 | | | .0000 | .0829 | -.1403 | -.1646 | -.1462 | | | |
| 110.000 | | | | | | | | -.1919 | | |
| 120.000 | -.0326 | -.0099 | .1727 | .0482 | .0149 | -.1446 | -.2261 | -.1606 | | |
| 135.000 | | | .2211 | .2024 | .0380 | -.0667 | -.0897 | | | |
| 150.000 | -.0652 | -.0048 | .2320 | .2113 | .0630 | .0001 | -.0510 | | | |
| 165.000 | -.0780 | | .2175 | | .2228 | .0870 | -.1430 | | | |
| 180.000 | -.0927 | .0238 | .2099 | .2439 | | | | | | |
| 320.000 | .1516 | .3046 | .3728 | .0646 | -.2030 | -.1663 | -.2510 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET835)

ALPHAO( 5) = 2.104 BETAO ( 4) = 6.587

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3456 | 1.1221 | .5590 | .1527 | .0114 | .9473 | | -.1502 | | -.1679 | -.2351 | -.1965 | -.2107 | .0680 | .0139 |
| 20.000 | | | .4752 | .0845 | .2541 | .5614 | | -.2049 | | -.3077 | | | | | |
| 40.000 | | | .3986 | .1019 | .0389 | .3162 | | -.2603 | | -.2647 | .0000 | .0000 | -.0142 | .0426 | .0959 |
| 55.000 | | | .3542 | .1233 | .0602 | .2053 | | -.0422 | | -.1679 | | | | | |
| 70.000 | | | .3724 | .1465 | .0896 | .1185 | | .0625 | | .0000 | -.2943 | -.3237 | -.2679 | -.0644 | |
| 90.000 | | .4111 | .4102 | .1879 | .1032 | .1095 | | .1635 | | .0000 | -.2667 | -.3197 | -.2892 | -.0592 | |
| 120.000 | | | .4249 | .2697 | .1674 | .1555 | | .3755 | | .0086 | -.2351 | -.4035 | -.2773 | -.2038 | |
| 140.000 | | | | | | | | | | -.1654 | | | | | |
| 150.000 | | | .4177 | .3327 | .2576 | .2087 | | | | -.2038 | -.3183 | -.1957 | -.2054 | -.1965 | |
| 151.000 | | | | | | | | | .4518 | | | | | | |
| 156.000 | | | | | | | | .7432 | | | | | | | |
| 162.000 | | | | | | | | | .5578 | | | | | | |
| 165.000 | | | | | | | | | | -.2060 | -.3152 | -.1844 | -.1822 | -.1773 | |
| 169.000 | | | | | | | | .8529 | | | | | | | |
| 174.000 | | | | | | | .9088 | | | | | | | | |
| 180.000 | 1.3456 | .6025 | .4477 | .3788 | .3212 | .2592 | | .8504 | | -.2538 | -.2939 | -.2155 | -.1718 | -.1654 | |
| 305.000 | | | .9895 | .7005 | .5542 | .3077 | | .1298 | | .0330 | | | | | |
| 320.000 | | | .8812 | .4757 | .3174 | .3917 | | -.0109 | | -.1740 | .0912 | -.1332 | -.0902 | -.1094 | .0495 |
| 340.000 | | | .7053 | .2361 | .1026 | .7885 | | -.3290 | | -.0806 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .2174 | .3491 | .4828 | .3725 | -.1457 | -.1791 | -.1577 | | -.1088 | -.1159 |
| 40.000 | -.0207 | .3348 | .6184 | .5146 | -.2643 | -.1339 | -.1542 | | -.1171 | -.1299 |
| 70.000 | .0431 | -.0645 | -.0795 | .0516 | .5623 | -.0419 | -.1577 | | | |
| 90.000 | .0661 | -.0015 | -.0223 | .1565 | -.0236 | -.0855 | -.1120 | | | |
| 105.000 | | | .0000 | .3145 | -.1531 | -.1858 | -.1497 | | | |
| 110.000 | | | | | | | | -.2054 | | |
| 120.000 | -.0255 | .0696 | .1145 | .5024 | -.0211 | -.1414 | -.2303 | -.2064 | | |
| 135.000 | | | .1499 | .2769 | .0499 | -.0407 | -.1043 | | | |
| 150.000 | -.0104 | .1129 | .1616 | .1759 | .0885 | -.0138 | -.0867 | | | |
| 165.000 | -.0216 | | .1501 | | .1052 | .0159 | -.1772 | | | |
| 180.000 | -.1321 | .1017 | .1472 | .1958 | | | | | | |
| 320.000 | .2155 | .3350 | .3960 | -.0323 | -.1845 | -.1737 | -.2876 | | | |

ARC97-019 IAB1 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB35)

ALPHAO( 6) = 4.193 BETAO ( 1) = -5.872

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4603 | 1.1301 | .5321 | .1424 | .1036 | .8108 | | -.0874 | | -.1576 | -.0074 | -.1337 | -.1078 | -.0169 | .0368 |
| 20 J00 | | | .6646 | .2722 | .0686 | .7309 | | -.3213 | | -.0682 | | | | | |
| 40.000 | | | .8972 | .4830 | .2879 | .2761 | | .0123 | | -.1350 | .0000 | .0000 | .0818 | -.0538 | .0844 |
| 55.000 | | | .9640 | .6644 | .4915 | .2245 | | .1589 | | .0957 | | | | | |
| 70.000 | | | .9223 | .6578 | .4839 | .2588 | | .1815 | | .0000 | -.0999 | -.0522 | -.0835 | -.0655 | |
| 90.000 | | 1.0199 | .8372 | .6213 | .4474 | .2953 | | .1919 | | .0000 | -.0796 | -.0971 | -.1286 | -.0753 | |
| 120.000 | | | .6712 | .4808 | .3302 | .2890 | | .4396 | | .2148 | -.0532 | -.2425 | -.2612 | -.1917 | |
| 140.000 | | | | | | | | | | .1850 | | | | | |
| 150.000 | | | .5249 | .3478 | .2953 | .2597 | | | | .0177 | -.3350 | -.2861 | -.2059 | -.1610 | |
| 151.000 | | | | | | | | | .7118 | | | | | | |
| 156.000 | | | | | | | | .9355 | | | | | | | |
| 162.000 | | | | | | | | | .7317 | | | | | | |
| 165.000 | | | | | | | | | | -.1903 | -.3016 | -.2580 | -.1857 | -.1719 | |
| 169.000 | | | | | | | | .9480 | | | | | | | |
| 174.000 | | | | | | | .9914 | | | | | | | | |
| 180.000 | 1.4603 | .6137 | .4009 | .3226 | .2733 | .2339 | | .8212 | | -.2615 | -.3283 | -.2340 | -.1845 | -.1822 | |
| 305.000 | | | .3799 | .0966 | .0896 | .2226 | | -.1048 | | -.2097 | | | | | |
| 320.000 | | | .4515 | .0588 | .0861 | .3016 | | -.2823 | | -.2577 | -.1737 | -.2302 | -.1731 | .0075 | .1398 |
| 340.000 | | | .5239 | .0610 | .0712 | .5515 | | -.0972 | | -.1750 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1789 | .4626 | .7087 | .4337 | -.1830 | -.1006 | -.2099 | | -.0676 | -.1099 |
| 40.000 | .2122 | .2874 | .4472 | .0178 | -.2304 | -.1331 | -.2587 | | -.0872 | -.0862 |
| 70.000 | -.0272 | -.1372 | -.1567 | -.1831 | .7352 | -.0487 | -.1183 | | | |
| 90.000 | -.0037 | -.0928 | -.1273 | .0391 | -.0268 | -.0816 | -.1081 | | | |
| 105.000 | | | .0000 | .0869 | -.0326 | -.1376 | -.1575 | | | |
| 110.000 | | | | | | | | -.2212 | | |
| 120.000 | -.1674 | -.1906 | .1513 | .1162 | .0631 | -.0814 | -.1453 | -.1871 | | |
| 135.000 | | | .1697 | .1738 | .0595 | -.0914 | -.0592 | | | |
| 150.000 | -.1581 | .0691 | .1706 | .1825 | -.1328 | .0789 | .0339 | | | |
| 165.000 | -.1604 | | .1626 | | .2835 | .2549 | -.1113 | | | |
| 180.000 | -.1268 | .1178 | .1523 | .2015 | | | | | | |
| 320.000 | .1385 | .5248 | .7054 | .5676 | -.1937 | -.0997 | -.1428 | | | |

ARC97-019 !A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB35)

ALPHAO( 6) = 4.191 BETAO ( 2) = -3.831

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4894 | 1.1511 | .5289 | .1066 | .0849 | .7059 | | -.1265 | | -.1544 | .0406 | -.1618 | -.1544 | .0301 | .0087 |
| 20.000 | | | .6268 | .2057 | .0642 | .6167 | | -.3441 | | -.0780 | | | | | |
| 40.000 | | | .8165 | .4002 | .2275 | .2522 | | -.0307 | | -.1683 | .0000 | .0000 | .0276 | .0150 | .0776 |
| 55.000 | | | .8609 | .5710 | .4267 | .1930 | | .1138 | | .0485 | | | | | |
| 70.000 | | | .8219 | .5707 | .4220 | .2188 | | .1519 | | .0000 | -.1245 | -.0923 | -.1405 | -.0795 | |
| 90.000 | | .9254 | .7655 | .5492 | .3942 | .2570 | | .1670 | | .0000 | -.1137 | -.1414 | -.1597 | -.0883 | |
| 120.000 | | | .6290 | .4529 | .3159 | .2784 | | .4852 | | .1761 | -.1029 | -.2684 | -.2501 | -.1594 | |
| 140.000 | | | | | | | | | | .1396 | | | | | |
| 150.000 | | | .5021 | .3541 | .3014 | .2730 | | | | -.0576 | -.3314 | -.2899 | -.1894 | -.1538 | |
| 151.000 | | | | | | | | | .6858 | | | | | | |
| 156.000 | | | | | | | | .9235 | | | | | | | |
| 162.000 | | | | | | | | | .7129 | | | | | | |
| 165.000 | | | | | | | | | | -.1790 | -.2986 | -.2431 | -.1736 | -.1583 | |
| 169.000 | | | | | | | | .9455 | | | | | | | |
| 174.000 | | | | | | | 1.0133 | | | | | | | | |
| 180.000 | 1.4894 | .5925 | .4030 | .3396 | .2984 | .2607 | | .8520 | | -.2651 | -.3225 | -.2109 | -.1831 | -.1631 | |
| 305.000 | | | .4534 | . 700 | .1340 | .2302 | | -.0870 | | -.1672 | | | | | |
| 320.000 | | | .5073 | .1031 | .0942 | .3244 | | -.2421 | | -.1810 | -.1191 | -.2024 | -.1367 | .0366 | .0989 |
| 340.000 | | | .5445 | .0594 | .0855 | .4603 | | -.1374 | | -.0899 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .2041 | .4024 | .5769 | .4339 | -.1863 | -.1989 | -.1501 | | -.0939 | -.0975 |
| 40.000 | .1701 | .2526 | .3894 | .0083 | -.1798 | -.1508 | -.2392 | | -.0480 | -.0878 |
| 70.000 | -.0403 | -.1421 | -.1575 | -.1670 | .6234 | -.0563 | -.1257 | | | |
| 90.000 | -.0210 | -.1032 | -.1399 | .0436 | -.0360 | -.0872 | -.1138 | | | |
| 105.000 | | | .0000 | .0940 | -.0453 | -.1508 | -.1707 | | | |
| 110.000 | | | | | | | | -.2183 | | |
| 120.000 | -.1412 | -.1444 | .1638 | .1298 | .0579 | -.0999 | -.1659 | -.1771 | | |
| 135.000 | | | .2044 | .1788 | .0282 | -.1122 | -.0897 | | | |
| 150.000 | -.1154 | -.0282 | .1876 | .1759 | -.1424 | .0497 | .0394 | | | |
| 165.000 | -.1025 | | .1667 | | .2713 | .1709 | -.1311 | | | |
| 180.000 | -.0855 | .0494 | .1851 | .1981 | | | | | | |
| 320.000 | .1724 | .4607 | .6276 | .4929 | -.1831 | -.0983 | -.1427 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB35)

ALPHAO( 6) = 4.197 BETAO ( 3) = .361

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4932 | 1.1655 | .5387 | .0929 | .0849 | .8383 | | -.1558 | | -.1592 | .0092 | -.1401 | -.0968 | .0753 | .0976 |
| 20.000 | | | .5752 | .1412 | .0769 | .5589 | | -.2508 | | -.1636 | | | | | |
| 40.000 | | | .6777 | .2660 | .1187 | .3838 | | -.1342 | | -.2945 | .0000 | .0000 | -.0055 | .0027 | .0030 |
| 55.000 | | | .6831 | .3814 | .2809 | .1999 | | .0472 | | -.0776 | | | | | |
| 70.000 | | | .6569 | .3899 | .2844 | .1493 | | .0968 | | .0000 | -.1996 | -.1938 | -.1931 | -.1304 | |
| 90.000 | | .7465 | .6329 | .3991 | .2806 | .1825 | | .1363 | | .0000 | -.2069 | -.2150 | -.2330 | -.1057 | |
| 120.000 | | | .5642 | .3893 | .2751 | .2511 | | .4604 | | .1063 | -.1673 | -.3401 | -.2476 | -.1484 | |
| 140.000 | | | | | | | | | | .0328 | | | | | |
| 150.000 | | | .4901 | .3649 | .3032 | .2688 | | | | -.1459 | -.3275 | -.2578 | -.1941 | -.1579 | |
| 151.000 | | | | | | | | | .6140 | | | | | | |
| 156.000 | | | | | | | | .8666 | | | | | | | |
| 162.000 | | | | | | | | | .6638 | | | | | | |
| 165.000 | | | | | | | | | | -.1769 | -.3201 | -.2251 | -.1947 | -.1498 | |
| 169.000 | | | | | | | | .9256 | | | | | | | |
| 174.000 | | | | | | | 1.0181 | | | | | | | | |
| 180.000 | 1.4932 | .5885 | .4409 | .3719 | .3241 | .2786 | | .9038 | | -.3048 | -.3185 | -.1789 | -.1877 | -.1446 | |
| 305.000 | | | .6758 | .3956 | .3522 | .2764 | | .0004 | | -.1002 | | | | | |
| 320.000 | | | .6586 | .2568 | .2046 | .4353 | | -.1456 | | -.2875 | -.0100 | -.2137 | -.0540 | .1176 | .0870 |
| 340.000 | | | .6029 | .1152 | .0974 | .6935 | | -.3624 | | -.1356 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .2067 | .3595 | .4712 | .3545 | -.1299 | -.1558 | -.1421 | | -.1130 | -.1121 |
| 40.000 | .1861 | .3090 | .4082 | .1267 | -.2191 | -.1862 | -.2179 | | -.0976 | -.1159 |
| 70.000 | -.0413 | -.1501 | -.1662 | -.0460 | .5664 | -.0608 | -.1482 | | | |
| 90.000 | -.0267 | -.1017 | -.1179 | .0623 | -.0614 | -.1134 | -.1327 | | | |
| 105.000 | | | .0000 | .1125 | -.0995 | -.1913 | -.1956 | | | |
| 110.000 | | | | | | | | -.1875 | | |
| 120.000 | -.0619 | -.0395 | .1685 | .1483 | -.0087 | -.1279 | -.1837 | -.1746 | | |
| 135.000 | | | .1811 | .2190 | .0572 | -.0449 | -.0798 | | | |
| 150.000 | -.0632 | .0416 | .1759 | .2358 | .1203 | .0302 | -.0369 | | | |
| 165.000 | -.0619 | | .1892 | | .2297 | .0935 | -.1308 | | | |
| 180.000 | -.0649 | .0091 | .2011 | .2907 | | | | | | |
| 320.000 | .2009 | .3697 | .4826 | .2261 | -.2036 | -.1427 | -.1943 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB35)

ALPHAO( 6) = 4.208 BETAO ( 4) = 4.530

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4598 | 1.1512 | .5364 | .0891 | .0424 | .9596 | | -.1817 | | -.1776 | -.1289 | -.1599 | -.1344 | .0052 | .1492 |
| 20.000 | | | .4885 | .0683 | .0475 | .5724 | | -.2381 | | -.2979 | | | | | |
| 40.000 | | | .4699 | .1237 | .0399 | .3449 | | -.2270 | | -.2906 | .0000 | .0000 | -.0066 | .0404 | .0970 |
| 55.000 | | | .4468 | .1839 | .1180 | .2253 | | -.0269 | | -.1570 | | | | | |
| 70.000 | | | .4421 | .2108 | .1354 | .1231 | | .0516 | | .0000 | -.2773 | -.2840 | -.2637 | -.0982 | |
| 90.000 | | .4923 | .4658 | .2465 | .1567 | .1184 | | .1142 | | .0000 | -.2571 | -.2964 | -.2821 | -.0960 | |
| 120.000 | | | .4516 | .2947 | .1956 | .1851 | | .3871 | | .0344 | -.2309 | -.3999 | -.2606 | -.1619 | |
| 140.000 | | | | | | | | | | -.1165 | | | | | |
| 150.000 | | | .4165 | .3238 | .2566 | .2107 | | | | -.2025 | -.3354 | -.2450 | -.2193 | -.1871 | |
| 151.000 | | | | | | | | | .5071 | | | | | | |
| 156.000 | | | | | | | | .7581 | | | | | | | |
| 162.000 | | | | | | | | | .5826 | | | | | | |
| 165.000 | | | | | | | | | | -.1948 | -.3329 | -.1943 | -.2003 | -.1754 | |
| 169.000 | | | | | | | | .8933 | | | | | | | |
| 174.000 | | | | | | | .8498 | | | | | | | | |
| 180.000 | 1.4598 | .5317 | .4178 | .3504 | .2943 | .2465 | | .8649 | | -.2766 | -.3191 | -.2270 | -.1908 | -.1729 | |
| 305.000 | | | .8923 | .5808 | .4746 | .2626 | | .0755 | | .0280 | | | | | |
| 320.000 | | | .7951 | .3627 | .2559 | .3174 | | -.0516 | | -.1257 | .0533 | -.1848 | -.0608 | -.0901 | .0253 |
| 340.000 | | | .6628 | .1491 | .0529 | .7470 | | -.3558 | | -.0909 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1926 | .3445 | .4892 | .3859 | -.1197 | -.1517 | -.1407 | | -.0991 | -.1055 |
| 40.000 | .0527 | .3586 | .5830 | .4458 | -.2712 | -.1119 | -.1481 | | -.1078 | -.1223 |
| 70.000 | -.0342 | -.0365 | -.0694 | .0395 | .5793 | -.0193 | -.1307 | | | |
| 90.000 | -.0058 | -.0064 | .0279 | .1264 | -.0157 | -.0552 | -.0936 | | | |
| 105.000 | | | .0000 | .1765 | -.0769 | -.1288 | -.1275 | | | |
| 110.000 | | | | | | | | -.2063 | | |
| 120.000 | -.0281 | .0749 | .2064 | .1698 | .0332 | -.1262 | -.2024 | -.1804 | | |
| 135.000 | | | .2077 | .1992 | .0575 | -.0429 | -.0865 | | | |
| 150.000 | -.0568 | .1193 | .1734 | .1601 | .0808 | .0127 | -.0483 | | | |
| 165.000 | -.0840 | | .1685 | | .1426 | .0653 | -.1582 | | | |
| 180.000 | -.1224 | .1106 | .1766 | .1795 | | | | | | |
| 320.000 | .2170 | .3293 | .3698 | .0027 | -.1530 | -.1572 | -.2315 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB35)

ALPHAO( 6) = 4.218 BETAO ( 5) = 6.589

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2991 | 1.1331 | .5314 | .1083 | .0117 | .8407 | | -.1509 | | -.1629 | -.2183 | -.1991 | -.1611 | .0684 | .1968 |
| 20.000 | | | .4501 | .0410 | .0315 | .5636 | | -.2015 | | -.3150 | | | | | |
| 40.000 | | | .3751 | .0643 | .0194 | .2988 | | -.2714 | | -.2752 | .0000 | .0000 | -.0250 | .0469 | .1228 |
| 55.000 | | | .3222 | .1099 | .0241 | .1927 | | -.0583 | | -.1911 | | | | | |
| 70.000 | | | .3398 | .1348 | .0532 | .0853 | | .0378 | | .0000 | -.3016 | -.3089 | -.2805 | .0152 | |
| 90.000 | | .3839 | .3745 | .1768 | .0787 | .0793 | | .1263 | | .0000 | -.2700 | -.3226 | -.2947 | -.0117 | |
| 120.000 | | | .3852 | .2478 | .1415 | .1326 | | .3587 | | .0011 | -.2470 | -.4090 | -.2798 | -.1101 | |
| 140.000 | | | | | | | | | | -.1697 | | | | | |
| 150.000 | | | .3682 | .3018 | .2236 | .1734 | | | | -.2215 | -.3354 | -.2178 | -.2228 | -.2098 | |
| 151.000 | | | | | | | | | .4300 | | | | | | |
| 156.000 | | | | | | | | .7088 | | | | | | | |
| 162.000 | | | | | | | | | .5366 | | | | | | |
| 165.000 | | | | | | | | | | -.2282 | -.3348 | -.2054 | -.1978 | -.1965 | |
| 169.000 | | | | | | | | .8359 | | | | | | | |
| 174.000 | | | | | | | .7968 | | | | | | | | |
| 180.000 | 1.2991 | .5282 | .3918 | .3359 | .2783 | .2176 | | .8103 | | -.2735 | -.3176 | -.2390 | -.1836 | -.1888 | |
| 305.000 | | | .9957 | .6937 | .5421 | .2821 | | .1127 | | .0795 | | | | | |
| 320.000 | | | .8576 | .4641 | .3093 | .3014 | | -.0093 | | -.1014 | .0780 | -.1510 | -.0414 | -.0951 | .0560 |
| 340.000 | | | .6973 | .2046 | .0722 | .7387 | | -.3302 | | -.0502 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .2296 | .3691 | .4991 | .3811 | -.1283 | -.1668 | -.1561 | | -.1046 | -.1123 |
| 40.000 | .0845 | .4216 | .6348 | .5233 | -.2683 | -.1108 | -.1474 | | -.1181 | -.1274 |
| 70.000 | .0396 | -.0874 | -.1066 | .0235 | .5704 | -.0652 | -.1671 | | | |
| 90.000 | .0622 | -.0231 | -.0529 | .1387 | -.0471 | -.1034 | -.1261 | | | |
| 105.000 | | | .0000 | .2176 | -.1774 | -.2091 | -.1703 | | | |
| 110.000 | | | | | | | | -.2126 | | |
| 120.000 | .0341 | .0711 | .0715 | .5524 | -.0517 | -.1787 | -.2539 | -.2055 | | |
| 135.000 | | | .1003 | .4681 | .0256 | -.0703 | -.1239 | | | |
| 150.000 | -.0076 | .0796 | .1316 | .1968 | .0327 | -.0287 | -.0945 | | | |
| 165.000 | -.0079 | | .1274 | | .1158 | .0068 | -.1881 | | | |
| 180.000 | -.0383 | .1029 | .1291 | .1610 | | | | | | |
| 320.000 | .2331 | .3385 | .3937 | -.0345 | -.1710 | -.1668 | -.2529 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB35)

ALPHAO( 7) = 6.319 BETAO ( 1) = -3.811

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4632 | 1.1535 | .4959 | .0403 | .0649 | .5559 | | -.1286 | | -.0940 | .0307 | -.1789 | -.1149 | .0846 | .0089 |
| 20.000 | | | .6088 | .1541 | .0611 | .4421 | | -.3398 | | -.0715 | | | | | |
| 40.000 | | | .8173 | .3688 | .1940 | .1971 | | -.0077 | | -.1556 | .0000 | .0000 | .0371 | .0741 | .0825 |
| 55.000 | | | .8621 | .5540 | .4102 | .1611 | | .1067 | | .0340 | | | | | |
| 70.000 | | | .8138 | .5540 | .4026 | .1870 | | .1105 | | .0000 | -.1319 | -.1182 | -.1250 | -.0740 | |
| 90.000 | | .9324 | .7583 | .5309 | .3719 | .2208 | | .1225 | | .0000 | -.1185 | -.1541 | -.1681 | -.0889 | |
| 120.000 | | | .6044 | .4174 | .2682 | .2338 | | .3356 | | .1636 | -.1179 | -.2760 | -.2884 | -.1744 | |
| 140.000 | | | | | | | | | | .1172 | | | | | |
| 150.000 | | | .4476 | .2916 | .2559 | .2290 | | | | -.0751 | -.3575 | -.3134 | -.2178 | -.1621 | |
| 151.000 | | | | | | | | | .6805 | | | | | | |
| 156.000 | | | | | | | | .8857 | | | | | | | |
| 162.000 | | | | | | | | | .7089 | | | | | | |
| 165.000 | | | | | | | | | | -.2073 | -.3220 | -.2687 | -.1959 | -.1721 | |
| 169.000 | | | | | | | | .9460 | | | | | | | |
| 174.000 | | | | | | | .9273 | | | | | | | | |
| 180.000 | 1.4632 | .5662 | .3426 | .2913 | .2534 | .2278 | | .8473 | | -.2910 | -.3390 | -.2339 | -.2010 | -.1714 | |
| 305.000 | | | .4167 | .1646 | .1427 | .1996 | | -.0703 | | -.1674 | | | | | |
| 320.000 | | | .4696 | .0659 | .0895 | .3005 | | -.2339 | | -.1559 | -.1156 | -.2197 | -.1149 | .0812 | .1421 |
| 340.000 | | | .4990 | .0116 | .0792 | .4083 | | -.1556 | | -.0690 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .2431 | .4243 | .5728 | .4389 | -.1729 | -.1778 | -.1457 | | -.1079 | -.1124 |
| 40.000 | .2071 | .2920 | .4062 | .0423 | -.1917 | -.1745 | -.2122 | | -.0663 | -.1091 |
| 70.000 | -.0555 | -.1643 | -.1943 | -.1751 | .4332 | -.0921 | -.1437 | | | |
| 90.000 | -.0458 | -.1269 | -.1709 | .0131 | -.0707 | -.1141 | -.1412 | | | |
| 105.000 | | | .0000 | .0539 | -.0665 | -.1668 | -.1905 | | | |
| 110.000 | | | | | | | | -.2312 | | |
| 120.000 | -.1857 | -.2043 | .1349 | .1016 | .0385 | -.1118 | -.1783 | -.1783 | | |
| 135.000 | | | .1530 | .1552 | .0292 | -.1221 | -.1199 | | | |
| 150.000 | -.1249 | .0015 | .1591 | .1713 | -.1541 | .0199 | -.0027 | | | |
| 165.000 | -.0939 | | .1494 | | .2256 | .1722 | -.1218 | | | |
| 180.000 | -.0742 | .0556 | .1485 | .1968 | | | | | | |
| 320.000 | .2579 | .4492 | .6166 | .4661 | -.1800 | -.0995 | -.1405 | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET835)

ALPHA0( 7) = 6.315 BETA0 ( 2) = -1.716

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4869 | 1.1765 | .5108 | .0419 | .0569 | .6650 | | -.1239 | | -.0787 | .0237 | -.1301 | -.1656 | .0601 | .1543 |
| 20.000 | | | .5930 | .1285 | .0578 | .4528 | | -.2930 | | -.0787 | | | | | |
| 40.000 | | | .7522 | .3017 | .1386 | .3135 | | -.0828 | | -.2356 | .0000 | .0000 | -.0092 | .0376 | .0063 |
| 55.000 | | | .7743 | .4623 | .3425 | .1569 | | .0716 | | -.0269 | | | | | |
| 70.000 | | | .7289 | .4601 | .3378 | .1562 | | .0934 | | .0000 | -.1709 | -.1677 | -.1520 | -.1093 | |
| 90.000 | | .8382 | .6847 | .4522 | .3197 | .1885 | | .1111 | | .0000 | -.1578 | -.1938 | -.1998 | -.1137 | |
| 120.000 | | | .5719 | .3855 | .2560 | .2292 | | .4213 | | .1273 | -.1457 | -.3040 | -.2932 | -.1488 | |
| 140.000 | | | | | | | | | | .0757 | | | | | |
| 150.000 | | | .4496 | .3096 | .2627 | .2371 | | | | -.1336 | -.3509 | -.3027 | -.2027 | -.1623 | |
| 151.000 | | | | | | | | | .6409 | | | | | | |
| 156.000 | | | | | | | | .8843 | | | | | | | |
| 162.000 | | | | | | | | | .6714 | | | | | | |
| 165.000 | | | | | | | | | | -.1996 | -.3397 | -.2565 | -.1979 | -.1636 | |
| 169.000 | | | | | | | | .9426 | | | | | | | |
| 174.000 | | | | | | | .9959 | | | | | | | | |
| 180.000 | 1.4869 | .5656 | .3661 | .3153 | .2712 | .2428 | | .8730 | | -.3244 | -.3362 | -.2119 | -.2046 | -.1646 | |
| 305.000 | | | .5234 | .2676 | .2491 | .2418 | | -.0379 | | -.1116 | | | | | |
| 320.000 | | | .5483 | .1354 | .1285 | .3397 | | -.1857 | | -.2376 | -.0800 | -.2065 | -.0865 | .1118 | .1437 |
| 340.000 | | | .5423 | .0205 | .0524 | .5415 | | -.2940 | | -.0902 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .2356 | .3813 | .5411 | .3220 | -.1570 | -.2051 | -.1497 | | -.1060 | -.1072 |
| 40.000 | .2178 | .3121 | .3792 | .0083 | -.1929 | -.1454 | -.1990 | | -.0921 | -.1066 |
| 70.000 | -.0870 | -.1889 | -.1903 | -.1271 | .4391 | -.0830 | -.1445 | | | |
| 90.000 | -.0541 | -.1245 | -.1621 | .0293 | -.0714 | -.1198 | -.1433 | | | |
| 105.000 | | | .0000 | .0850 | -.0830 | -.1832 | -.2010 | | | |
| 110.000 | | | | | | | | -.2281 | | |
| 120.000 | -.1400 | -.1190 | .1474 | .1222 | .0182 | -.1258 | -.1916 | -.1790 | | |
| 135.000 | | | .1477 | .1829 | .0081 | -.1184 | -.1033 | | | |
| 150.000 | -.0808 | .0724 | .1435 | .2051 | -.0403 | .0225 | -.0362 | | | |
| 165.000 | -.0651 | | .1464 | | .2045 | .1185 | -.1300 | | | |
| 180.000 | -.0506 | .0381 | .1600 | .2480 | | | | | | |
| 320.000 | .1961 | .4037 | .5327 | .3261 | -.1651 | -.1345 | -.1565 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET835)

ALPHAO( 7) = 6.316 BETAO ( 3) = .374

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4773 | 1.1748 | .5152 | .0684 | .0614 | .8594 | | -.1405 | | -.1561 | -.0059 | -.1677 | -.0458 | .0922 | .1299 |
| 20.000 | | | .5527 | .1102 | .0512 | .5676 | | -.2600 | | -.1558 | | | | | |
| 40.000 | | | .6567 | .2487 | .1172 | .3743 | | -.1321 | | -.2944 | .0000 | .0000 | .0194 | .0523 | .0035 |
| 55.000 | | | .6734 | .3801 | .2818 | .1870 | | .0410 | | -.0689 | | | | | |
| 70.000 | | | .6434 | .3814 | .2790 | .1361 | | .0827 | | .0000 | -.2066 | -.2066 | -.1955 | -.1284 | |
| 90.000 | | .7285 | .6210 | .3865 | .2651 | .1664 | | .1124 | | .0000 | -.1904 | -.2277 | -.2480 | -.1132 | |
| 120.000 | | | .5344 | .3574 | .2422 | .2211 | | .4257 | | .1007 | -.1728 | -.3303 | -.2855 | -.1258 | |
| 140.000 | | | | | | | | | | .0298 | | | | | |
| 150.000 | | | .4468 | .3239 | .2703 | .2359 | | | | -.1597 | -.3455 | -.2781 | -.2081 | -.1660 | |
| 151.000 | | | | | | | | | .6025 | | | | | | |
| 156.000 | | | | | | | | .8552 | | | | | | | |
| 162.000 | | | | | | | | | .6422 | | | | | | |
| 165.000 | | | | | | | | | | -.1951 | -.3362 | -.2432 | -.2078 | -.1631 | |
| 169.000 | | | | | | | | .9182 | | | | | | | |
| 174.000 | | | | | | | .9712 | | | | | | | | |
| 180.000 | .4773 | .5369 | .3938 | .3340 | .2877 | .2416 | | .8766 | | -.3228 | -.3343 | -.2024 | -.2056 | -.1618 | |
| 305.000 | | | .6838 | .3767 | .3357 | .2568 | | -.0073 | | -.0694 | | | | | |
| 320.000 | | | .8690 | .2363 | .1825 | .4021 | | -.1393 | | -.2590 | -.0152 | -.2398 | -.0350 | .1388 | .1665 |
| 340.000 | | | .5954 | .0917 | .0735 | .6702 | | -.3734 | | -.1205 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .2555 | .4030 | .5149 | .3853 | -.1608 | -.1612 | -.1516 | | -.1224 | -.1256 |
| 40.000 | .2330 | .3442 | .4438 | .1601 | -.2565 | -.1521 | -.1829 | | -.1131 | -.1144 |
| 70.000 | -.0533 | -.1660 | -.1772 | -.0681 | .5739 | -.0810 | -.1529 | | | |
| 90.000 | -.0353 | -.1176 | -.1319 | .0465 | -.0794 | -.1321 | -.1490 | | | |
| 105.000 | | | .0000 | .1025 | -.1046 | -.1990 | -.2187 | | | |
| 110.000 | | | | | | | | -.1935 | | |
| 120.000 | -.0862 | -.0522 | .1526 | .1345 | .0088 | -.1435 | -.1942 | -.1703 | | |
| 135.000 | | | .1607 | .1994 | .0273 | -.0726 | -.0968 | | | |
| 150.000 | -.0459 | .0621 | .1620 | .2194 | .0995 | .0203 | -.0445 | | | |
| 165.000 | -.0401 | | .1762 | | .2117 | .0722 | -.1316 | | | |
| 180.000 | -.0436 | .0423 | .1865 | .2801 | | | | | | |
| 320.000 | .2414 | .3947 | .4949 | .2410 | -.1531 | -.1723 | -.2064 | | | |

ARC97-019 !A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET835)

ALPHA0( 7) = 6.321 BETA0 ( 4) = 2.475

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4701 | 1.1813 | .5456 | .0622 | .0514 | .7513 | | -.2261 | | -.1838 | -.0653 | -.1599 | -.1379 | .0575 | .1193 |
| 20.000 | | | .5172 | .0725 | .0533 | .4994 | | -.2535 | | 2104 | | | | | |
| 40.000 | | | .5503 | .1720 | .0875 | .3285 | | -.1829 | | 321 | .0000 | .0000 | .0195 | .0252 | .0171 |
| 55.000 | | | .5405 | .2664 | .2034 | .1782 | | -.0039 | | 27 | | | | | |
| 70.000 | | | .5209 | .2804 | .2094 | .1279 | | .0519 | | 10 | -.2379 | -.2440 | -.2331 | -.1208 | |
| 90.000 | | .5832 | .5279 | .3092 | .2046 | .1368 | | .0915 | | .0( | -.2261 | -.2737 | -.2693 | -.1027 | |
| 120.000 | | | .4792 | .3149 | .2127 | .1972 | | .3363 | | .06 | -.2124 | -.3629 | -.2724 | -.1335 | |
| 140.000 | | | | | | | | | | -.0397 | | | | | |
| 150.000 | | | .4123 | .3102 | .2554 | .2162 | | | | -.1957 | -.3489 | -.2800 | -.2165 | -.1764 | |
| 151.000 | | | | | | | | | .5575 | | | | | | |
| 156.000 | | | | | | | | .8489 | | | | | | | |
| 162.000 | | | | | | | | | .5998 | | | | | | |
| 165.000 | | | | | | | | | | -.1951 | -.3399 | -.2229 | -.2166 | -.1748 | |
| 169.000 | | | | | | | | .8957 | | | | | | | |
| 174.000 | | | | | | | .8655 | | | | | | | | |
| 180.000 | 1.4701 | .4849 | .3791 | .3239 | .2836 | .2327 | | .8874 | | -.3108 | -.3310 | -.2236 | -.2087 | -.1680 | |
| 305.000 | | | .7936 | .4651 | .3854 | .2371 | | .0307 | | -.0228 | | | | | |
| 320.000 | | | .7523 | .2896 | .1808 | .3744 | | -.0884 | | -.2015 | .0175 | -.2229 | -.0072 | .1377 | .0925 |
| 340.000 | | | .6509 | .1134 | .0478 | .6345 | | -.3758 | | -.1062 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .2256 | .3603 | .4635 | .3731 | -.1110 | -.1427 | -.1273 | | -.0965 | -.1007 |
| 40.000 | .2358 | .3481 | .5037 | .3443 | -.2325 | -.1376 | -.1590 | | -.0897 | -.1084 |
| 70.000 | -.0515 | -.1519 | -.1708 | -.0413 | .4942 | -.0857 | -.1629 | | | |
| 90.000 | -.0230 | -.0945 | -.1202 | .0483 | -.1003 | -.1398 | -.1499 | | | |
| 105.000 | | | .0000 | .1048 | -.1350 | -.2189 | -.2227 | | | |
| 110.000 | | | | | | | | -.1810 | | |
| 120.000 | -.0470 | -.0208 | .1793 | .1352 | -.0151 | -.1535 | -.1936 | -.1813 | | |
| 135.000 | | | .1942 | .2223 | .0329 | -.0850 | -.1250 | | | |
| 150.000 | -.0359 | .0285 | .2085 | .2158 | .0345 | -.0242 | -.0791 | | | |
| 165.000 | -.0450 | | .1965 | | .1854 | .0395 | -.1519 | | | |
| 180.000 | -.0615 | .0694 | .1609 | .2081 | | | | | | |
| 320.000 | .2176 | .3624 | .4036 | .1068 | -.1567 | -.1635 | -.2159 | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET835)

ALPHA0( 7) = 6.324 BETA0 ( 5) = 4.539

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4424 | 1.1425 | .4966 | .0329 | .0174 | .8795 | | -.1753 | | -.1761 | -.1349 | .0000 | -.1349 | -.1188 | -.0938 |
| 20.000 | | | .4610 | .0244 | .0111 | .5232 | | -.2399 | | -.2431 | | | | | |
| 40.000 | | | .4435 | .0929 | .0190 | .3186 | | -.2293 | | -.2998 | .0000 | .0292 | .0000 | .0000 | .0311 |
| 55.000 | | | .4095 | .1668 | .1030 | .1964 | | -.0411 | | -.1607 | | | | | |
| 70.000 | | | .3982 | .1884 | .1217 | .1011 | | .0294 | | .0000 | .4932 | -.1216 | -.2778 | -.2797 | |
| 90.000 | | .4688 | .4376 | .2272 | .1352 | .0958 | | .0899 | | .0000 | .5560 | -.2256 | -.2633 | -.2991 | |
| 120.000 | | | .4145 | .2659 | .1700 | .1578 | | .3532 | | .0292 | -.1761 | -.2160 | -.2449 | -.3904 | |
| 140.000 | | | | | | | | | | -.1216 | | | | | |
| 150.000 | | | .3710 | .2835 | .2233 | .1788 | | | | -.2256 | -.2431 | -.3003 | -.3517 | -.2617 | |
| 151.000 | | | | | | | | | .4932 | | | | | | |
| 156.000 | | | | | | | | .7538 | | | | | | | |
| 162.000 | | | | | | | | | .5560 | | | | | | |
| 165.000 | | | | | | | | | | -.2160 | -.2998 | .0270 | -.3482 | -.2143 | |
| 169.000 | | | | | | | | .8894 | | | | | | | |
| 174.000 | | | | | | | .8137 | | | | | | | | |
| 180.000 | 1.4424 | .4682 | .3486 | .3057 | .2575 | .2036 | | .8406 | | -.3003 | -.1607 | -.1365 | -.3298 | -.2470 | |
| 305.000 | | | .8788 | .5609 | .4652 | .2434 | | .0751 | | .0270 | | | | | |
| 320.000 | | | .7790 | .3169 | .2305 | .2735 | | -.0336 | | -.1365 | -.7091 | -.1213 | .0203 | -.1917 | -.2573 |
| 340.000 | | | .6253 | .0853 | .0152 | .7028 | | -.3518 | | -.1213 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.2874 | -.0875 | .0250 | .3974 | -.0511 | .0087 | .5230 | | .0813 | -.1449 |
| 40.000 | -.2609 | -.1277 | .2499 | -.0598 | .0000 | .1105 | -.0344 | | -.1685 | -.1071 |
| 70.000 | -.2294 | -.1955 | .2143 | .0116 | .1909 | .1717 | -.0995 | | | |
| 90.000 | -.2149 | -.1887 | -.0265 | .0752 | .2476 | .2065 | .0029 | | | |
| 105.000 | | | -.0022 | .0838 | .2079 | .2372 | .0371 | | | |
| 110.000 | | | | | | | | -.1770 | | |
| 120.000 | -.2052 | -.1865 | -.0214 | .0999 | .1569 | .1367 | .0627 | -.1346 | | |
| 135.000 | | | -.0428 | .3406 | .1377 | .1677 | .1940 | | | |
| 150.000 | .0500 | -.0278 | -.0649 | .5012 | .3701 | .0191 | -.1542 | | | |
| 165.000 | -.0028 | | -.0950 | | .3733 | -.1190 | -.1545 | | | |
| 180.000 | .0044 | .1228 | .2487 | .5938 | | | | | | |
| 320.000 | -.0991 | .1362 | .3640 | -.1060 | .4393 | -.2821 | -.1154 | | | |

DATE 08 OCT 75 !AB1B - PRESSURE SOURCE DATA TABULATION

ARC97-019 !AB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB36) ( 04 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.000 RN/FT = 2.500
ELV-1B = 8.000 ELV-0B = -4.000
RUDDER = .000 SPDBRK = .000

ALPHA0( 1) = -6.354 BETA0 ( 1) = -4.160

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5822 | .8080 | .3116 | .6971 | .3071 | .5897 | | .0654 | | .0300 | .1847 | -.0064 | .0291 | .0265 | .0097 |
| 20.000 | | | .2747 | .7524 | .4108 | .5443 | | -.0512 | | .0934 | | | | | |
| 40.000 | | | .4744 | .7873 | .5834 | .3326 | | .2398 | | -.0186 | .0000 | .0000 | .0339 | .1132 | .0012 |
| 55.000 | | | .6267 | .5405 | .6837 | .4245 | | .3932 | | .2347 | | | | | |
| 70.000 | | | .7038 | .4910 | .6473 | .4878 | | .3893 | | .0000 | .0572 | .0468 | .0374 | .0038 | |
| 90.000 | | .9510 | .7592 | .4987 | .4949 | .5133 | | .3999 | | .0000 | .0917 | .0326 | -.0007 | .0047 | |
| 120.000 | | | .7990 | .6115 | .4702 | .5223 | | .7163 | | .4529 | .1334 | -.0746 | -.0231 | .0207 | |
| 140.000 | | | | | | | | | | .4127 | | | | | |
| 150.000 | | | .7589 | .5894 | .5165 | .4820 | | | | .2241 | -.0617 | -.0346 | -.0010 | .0266 | |
| 151.000 | | | | | | | | | 1.0659 | | | | | | |
| 156.000 | | | | | | | | 1.2279 | | | | | | | |
| 162.000 | | | | | | | | | 1.1603 | | | | | | |
| 165.000 | | | | | | | | | | .1240 | -.0636 | -.0161 | -.0036 | .0234 | |
| 169.000 | | | | | | | | 1.3258 | | | | | | | |
| 174.000 | | | | | | | 1.1583 | | | | | | | | |
| 180.000 | 1.5822 | 1.0208 | .6611 | .5517 | .4983 | .4558 | | 1.2789 | | .0039 | -.0952 | .0015 | .0089 | .0182 | |
| 305.000 | | | .3487 | .2551 | .3673 | .2847 | | .1746 | | .0623 | | | | | |
| 320.000 | | | .2442 | .5712 | .3471 | .3600 | | .0224 | | -.0061 | .0895 | -.0330 | -.0602 | -.0217 | -.0494 |
| 340.000 | | | .2709 | .6195 | .2974 | .4153 | | .0352 | | -.0433 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0766 | .2383 | .4555 | .2857 | -.2054 | -.2525 | -.1182 | | -.1036 | -.1059 |
| 40.000 | -.1190 | .0871 | .2182 | -.0639 | -.2149 | -.0688 | -.1701 | | -.1626 | -.1583 |
| 70.000 | .0684 | -.0073 | -.0016 | .0767 | .5435 | .0790 | .0283 | | | |
| 90.000 | .0776 | .0420 | .0046 | .1776 | .0946 | .0561 | .0293 | | | |
| 105.000 | | | .0000 | .2362 | .0708 | -.0162 | -.0356 | | | |
| 110.000 | | | | | | | | -.0742 | | |
| 120.000 | .0852 | .0718 | .0888 | .2699 | .2130 | .0537 | -.0223 | -.0885 | | |
| 135.000 | | | .2375 | .3166 | .2104 | .0720 | .0967 | | | |
| 150.000 | .0253 | .0387 | .2323 | .2976 | .0760 | .2504 | .2077 | | | |
| 165.000 | .0201 | | .1775 | | .4851 | .3798 | -.0291 | | | |
| 180.000 | .0077 | .0017 | .0931 | .2849 | | | | | | |
| 320.000 | .0342 | .0901 | .3970 | .2051 | -.1178 | -.1619 | -.1775 | | | |

ARC97-019 !A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET836)

ALPHA0( 1) = -6.341 BETA0 ( 2) = -2.050

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5777 | .8194 | .2692 | .7019 | .3462 | .6553 | | .0678 | | -.0357 | .2541 | -.0571 | .0028 | .1037 | .0117 |
| 20.000 | | | .2598 | .7480 | .4112 | .5710 | | .0072 | | .0462 | | | | | |
| 40.300 | | | .4356 | .5148 | .5251 | .4783 | | .1970 | | -.0539 | .0000 | .0000 | .0092 | .0704 | .0225 |
| 55.000 | | | .5717 | .4394 | .5935 | .3821 | | .3616 | | .1951 | | | | | |
| 70.000 | | | .6460 | .3805 | .4410 | .4393 | | .3804 | | .0000 | .0281 | .0084 | .0114 | -.0104 | |
| 90.000 | | .8818 | .7055 | .4537 | .3510 | .4492 | | .3737 | | .0000 | .0649 | -.0033 | -.0270 | -.0101 | |
| 120.000 | | | .7585 | .5791 | .4364 | .4281 | | .6850 | | .4063 | .0914 | -.0963 | -.0296 | .0082 | |
| 140.000 | | | | | | | | | | .3555 | | | | | |
| 150.000 | | | .7393 | .5906 | .5128 | .4559 | | | | .1779 | -.0701 | -.0331 | .0053 | .0267 | |
| 151.000 | | | | | | | | | 1.0086 | | | | | | |
| 156.000 | | | | | | | | 1.1209 | | | | | | | |
| 162.000 | | | | | | | | | 1.1460 | | | | | | |
| 165.000 | | | | | | | | | | .1192 | -.0881 | -.0008 | .0185 | .0280 | |
| 169.000 | | | | | | | | 1.3297 | | | | | | | |
| 174.000 | | | | | | | 1.1350 | | | | | | | | |
| 180.000 | 1.5777 | 1.0081 | .6727 | .5689 | .5157 | .4633 | | 1.3289 | | -.0265 | -.0810 | -.0043 | .0409 | .0280 | |
| 305.000 | | | .4155 | .2997 | .4435 | .3757 | | .2153 | | .0962 | | | | | |
| 320.000 | | | .2890 | .5324 | .4156 | .4568 | | .0628 | | .0132 | .1289 | -.0165 | -.0530 | -.0325 | -.0256 |
| 340.000 | | | .2441 | .6575 | .3562 | .4847 | | .0359 | | -.0094 | | | | | |

| X/LB | .0520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9800 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0512 | .1708 | .4491 | .3027 | -.1642 | -.1959 | -.1368 | | -.0860 | -.1169 |
| 40.000 | -.0932 | .0385 | .3283 | -.0900 | -.2155 | -.0857 | -.1714 | | -.1130 | -.1023 |
| 70.000 | .0540 | -.0187 | -.0198 | .0890 | .5583 | .0602 | .0149 | | | |
| 90.000 | .0613 | .0303 | -.0057 | .1687 | .0710 | .0399 | .0221 | | | |
| 105.000 | | | .0000 | .2086 | .0357 | -.0360 | -.0491 | | | |
| 110.000 | | | | | | | | -.0801 | | |
| 120.000 | .0466 | .0641 | .1120 | .2351 | .1995 | .0371 | -.0442 | -.0947 | | |
| 135.000 | | | .1932 | .3244 | .1979 | .0775 | .0893 | | | |
| 150.000 | .0195 | .0336 | .1631 | .3218 | .1746 | .2276 | .1819 | | | |
| 165.000 | .0195 | | .0595 | | .4564 | .3219 | -.0546 | | | |
| 180.000 | .0107 | .0103 | .0179 | .3731 | | | | | | |
| 320.000 | .0192 | .1654 | .3594 | .1423 | -.1429 | -.1394 | -.1691 | | | |

ARC87-019 IA91 LVAP(ALLHL SEALED) ORB. FUSELAGE (RLT836)

ALPHA0( 1) = -6.322 BETA0 ( 3) = .062

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0300 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1880 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.9987 | .0420 | .2231 | .0521 | .3707 | .6156 | | .0659 | | -.0360 | .2253 | -.0679 | -.0558 | .0527 | -.0086 |
| 20.000 | | | .2433 | .9486 | .4169 | .5018 | | .0647 | | -.0167 | | | | | |
| 40.000 | | | .3920 | .3614 | .4825 | .5212 | | .1462 | | -.0773 | .0000 | .0000 | -.0090 | .0302 | .0484 |
| 55.000 | | | .5040 | .3442 | .5191 | .3325 | | .3190 | | .1635 | | | | | |
| 70.000 | | | .5734 | .3095 | .3273 | .3892 | | .3591 | | .0000 | .0060 | -.0196 | -.0125 | -.0260 | |
| 90.000 | | .7939 | .6313 | .3803 | .2815 | .3057 | | .3492 | | .0000 | .0449 | -.0237 | -.0571 | -.0211 | |
| 120.000 | | | .6353 | .5220 | .3870 | .3364 | | .5987 | | .3555 | .0650 | -.1232 | -.0362 | -.0070 | |
| 140.000 | | | | | | | | | | .2295 | | | | | |
| 150.000 | | | .7056 | .5669 | .4927 | .4299 | | | | .1242 | -.0711 | -.0215 | .0113 | .0170 | |
| 151.000 | | | | | | | | | .9183 | | | | | | |
| 156.000 | | | | | | | | 1.1406 | | | | | | | |
| 162.000 | | | | | | | | | 1.0565 | | | | | | |
| 165.000 | | | | | | | | | | .1019 | -.1019 | .0077 | .0360 | .0281 | |
| 169.000 | | | | | | | | 1.3233 | | | | | | | |
| 174.000 | | | | | | | 1.1902 | | | | | | | | |
| 180.000 | 1.9987 | 1.0037 | .6704 | .5692 | .5138 | .4632 | | 1.3275 | | -.0387 | -.0682 | .0084 | .0443 | .0327 | |
| 305.000 | | | .4653 | .3452 | .4981 | .3873 | | .2635 | | .1304 | | | | | |
| 320.000 | | | .3130 | .5201 | .4606 | .5064 | | .1019 | | .0176 | .1623 | -.0073 | -.0391 | -.0099 | -.0073 |
| 340.000 | | | .2472 | .6601 | .3831 | .4581 | | .0423 | | .0313 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0060 | .1867 | .3709 | .3847 | -.1604 | -.1427 | -.1780 | | -.1193 | -.1258 |
| 40.000 | -.0698 | .1014 | .3049 | -.0572 | -.2168 | -.1283 | -.1989 | | -.1373 | -.1167 |
| 70.000 | .0488 | -.0243 | -.0277 | .0958 | .4970 | .0954 | .0000 | | | |
| 90.000 | .0510 | .0245 | -.0129 | .1511 | .0947 | .0410 | .0193 | | | |
| 105.000 | | | .0000 | .1659 | .0062 | -.0532 | -.0589 | | | |
| 110.000 | | | | | | | | -.0890 | | |
| 120.000 | .0245 | .0478 | .1054 | .1892 | .1791 | .0157 | -.0615 | -.1278 | | |
| 135.000 | | | .1587 | .3191 | .1715 | .0788 | .0716 | | | |
| 150.000 | .0078 | .0184 | .1038 | .3260 | .1682 | .1844 | .1511 | | | |
| 165.000 | .0147 | | .0305 | | .4096 | .2577 | -.1021 | | | |
| 180.000 | .0137 | .0108 | .0190 | .4171 | | | | | | |
| 320.900 | -.0380 | .0905 | .3732 | .0478 | -.1640 | -.1458 | -.2041 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB36)

ALPHAO( 1) = -6.302 BETAO ( 4) = 2.174

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5997 | .8139 | .3841 | .6219 | .2327 | .4591 | | -.0020 | | .0239 | .1761 | .0174 | -.0860 | .0717 | -.0354 |
| 20.000 | | | .3716 | .6168 | .2749 | .3368 | | .0249 | | -.0245 | | | | | |
| 40.000 | | | .3410 | .5577 | .3671 | .3581 | | .1108 | | -.0677 | .0000 | .0000 | -.0269 | .0213 | .0737 |
| 55.000 | | | .4323 | .3867 | .4037 | .1555 | | .2604 | | .1265 | | | | | |
| 70.000 | | | .4889 | .3024 | .3118 | .2317 | | .2938 | | .0000 | -.0114 | -.0535 | -.0333 | -.0269 | |
| 90.000 | | .6966 | .5486 | .3222 | .2363 | .2431 | | .2813 | | .0000 | .0152 | -.0503 | -.0866 | -.0272 | |
| 120.000 | | | .6221 | .4644 | .3374 | .2849 | | .5151 | | .2552 | .0220 | -.1541 | -.0449 | -.0407 | |
| 140.000 | | | | | | | | | | .1211 | | | | | |
| 150.000 | | | .6515 | .5359 | .4646 | .3909 | | | | .0952 | -.1153 | -.0173 | .0078 | .0085 | |
| 151.000 | | | | | | | | | .8275 | | | | | | |
| 156.000 | | | | | | | | 1.0957 | | | | | | | |
| 162.000 | | | | | | | | | 1.0238 | | | | | | |
| 165.000 | | | | | | | | | | .0829 | -.0962 | -.0214 | .0290 | 0200 | |
| 169.000 | | | | | | | | 1.2728 | | | | | | | |
| 174.000 | | | | | | | 1.1707 | | | | | | | | |
| 180.000 | 1.5997 | .9730 | .6522 | .5581 | .5085 | .4524 | | 1.3179 | | -.0350 | -.0774 | -.0015 | .0325 | .0219 | |
| 305.000 | | | .5189 | .5398 | .4886 | .3825 | | .3063 | | .1719 | | | | | |
| 320.000 | | | .4204 | .5947 | .3909 | .3639 | | .1473 | | -.0444 | .1787 | -.0356 | -.0384 | .0131 | -.0236 |
| 340.000 | | | .4166 | .6104 | .2635 | .4393 | | -.0527 | | .0667 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0825 | .1461 | .3870 | .3160 | -.1279 | -.1493 | -.1325 | | -.1054 | -.1061 |
| 40.000 | -.0341 | .0295 | .3502 | -.0178 | -.2240 | -.1762 | -.1783 | | -.1198 | -.1238 |
| 70.000 | .0383 | -.0187 | -.0194 | .0964 | .3329 | .0403 | -.0161 | | | |
| 90.000 | .0410 | .0334 | .0013 | .1602 | .0288 | .0236 | .0062 | | | |
| 105.000 | | | .0000 | .1378 | -.0151 | -.0686 | -.0717 | | | |
| 110.000 | | | | | | | | -.1060 | | |
| 120.000 | -.0043 | .0382 | .1562 | .1525 | .1299 | -.0059 | -.0907 | -.1502 | | |
| 135.000 | | | .1773 | .2955 | .1571 | .0425 | .0369 | | | |
| 150.000 | -.0016 | -.0049 | .1154 | .3112 | .1656 | .1282 | .0948 | | | |
| 165.000 | .0029 | | .0197 | | .3508 | .2165 | -.1211 | | | |
| 180.000 | .0072 | .0059 | .0329 | .3778 | | | | | | |
| 320.000 | -.0151 | .1243 | .3778 | -.0801 | -.1739 | -.1423 | -.1845 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB36)

ALPHAO( 1) = -6.286 BETAO ( 5) = 4.251

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5742 | .7976 | .2490 | .7138 | .3106 | .5604 | | .0022 | | .0526 | .1010 | .0130 | -.1247 | .0696 | .0069 |
| 20.000 | | | .2189 | .6459 | .2957 | .3141 | | .0097 | | -.0518 | | | | | |
| 40.000 | | | .2807 | .4751 | .3387 | .3229 | | .0670 | | -.0124 | .0000 | .0000 | -.0362 | .0269 | .0115 |
| 55.000 | | | .3601 | .2792 | .3585 | .1656 | | .2095 | | .0830 | | | | | |
| 70.000 | | | .4208 | .2119 | .2129 | 1857 | | .2877 | | .0000 | -.0307 | -.0753 | -.0520 | -.0164 | |
| 90.000 | | .6309 | .4817 | .2617 | .1556 | .1740 | | .1653 | | .0000 | -.0090 | -.0706 | -.1055 | -.0269 | |
| 120.000 | | | .5571 | .4049 | .2811 | .2352 | | .4115 | | .1896 | -.0417 | -.1520 | -.0603 | -.0795 | |
| 140.000 | | | | | | | | | | .0683 | | | | | |
| 150.000 | | | .6044 | .5020 | .4260 | .3630 | | | | .0518 | -.1374 | -.0407 | -.0074 | -.0025 | |
| 151.000 | | | | | | | | | .7420 | | | | | | |
| 156.000 | | | | | | | | 1.0532 | | | | | | | |
| 162.000 | | | | | | | | | .9641 | | | | | | |
| 165.000 | | | | | | | | | | .0421 | -.0938 | -.0289 | .0051 | .0096 | |
| 169.000 | | | | | | | | 1.2494 | | | | | | | |
| 174.000 | | | | | | | 1.1295 | | | | | | | | |
| 180.000 | 1.5742 | .9687 | .6449 | .5510 | .4916 | .4429 | | 1.2955 | | -.0226 | -.1006 | -.0029 | .0048 | .0112 | |
| 305.000 | | | .5817 | .4617 | .6890 | .4535 | | .3393 | | .2100 | | | | | |
| 320.000 | | | .3793 | .7446 | .5997 | .2941 | | .1929 | | -.0090 | .1899 | -.0234 | -.0398 | .0335 | .0030 |
| 340.000 | | | .2066 | .7452 | .4129 | .5562 | | -.1021 | | .1032 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0857 | .1477 | .3076 | .3817 | -.1359 | -.1605 | -.1367 | | -.1080 | -.1109 |
| 40.000 | .0043 | .0397 | .4197 | .0359 | -.2172 | -.1680 | -.1547 | | -.1158 | -.1191 |
| 70.000 | .0384 | -.0284 | -.0294 | .1038 | .3054 | .0364 | -.0233 | | | |
| 90.000 | .0384 | .0197 | -.0139 | .1744 | .0145 | -.0072 | -.0145 | | | |
| 105.000 | | | .0000 | .1232 | -.0298 | -.0855 | -.0864 | | | |
| 110.000 | | | | | | | | -.1223 | | |
| 120.000 | -.0169 | .0172 | .1488 | .0875 | .0729 | -.0383 | -.1201 | -.1763 | | |
| 135.000 | | | .1478 | .2533 | .1183 | .0185 | -.0037 | | | |
| 150.000 | -.0156 | -.0205 | .0723 | .2864 | .1331 | .0761 | .0568 | | | |
| 165.000 | -.0003 | | .0523 | | .2844 | .1610 | -.1321 | | | |
| 180.000 | .0086 | .0015 | .1317 | .2962 | | | | | | |
| 320.000 | -.0219 | .1787 | .3427 | -.0999 | -.1608 | -.1367 | -.1831 | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB36)

ALPHAO( 2) = -4.273 BETAO ( 1) = -6.247

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5291 | .7921 | .3409 | .6453 | .2695 | .5516 | | .0734 | | .0590 | .0037 | .0555 | .0144 | -.0068 | .0562 |
| 20.000 | | | .3306 | .7277 | .4197 | .5221 | | -.0792 | | .1286 | | | | | |
| 40.000 | | | .4995 | .7863 | .6181 | .2788 | | .2462 | | -.0029 | .0000 | .0000 | .0093 | .1043 | .0889 |
| 55.000 | | | .6574 | .8155 | .7238 | .4465 | | .3844 | | .2382 | | | | | |
| 70.000 | | | .7310 | .6338 | .6767 | .5035 | | .3581 | | .0000 | .0610 | .0584 | .0535 | -.0046 | |
| 90.000 | | .9870 | .7761 | .5693 | .5777 | .5221 | | .3882 | | .0000 | .0891 | .0516 | .0192 | -.0039 | |
| 120.000 | | | .7933 | .6027 | .5048 | .5372 | | .6288 | | .4612 | .1429 | -.0543 | -.0415 | -.0193 | |
| 140.000 | | | | | | | | | | .4393 | | | | | |
| 150.000 | | | .7198 | .5392 | .4728 | .4683 | | | | .2471 | -.0950 | -.0639 | -.0437 | -.0123 | |
| 151.000 | | | | | | | | | 1.0654 | | | | | | |
| 156.000 | | | | | | | | 1.2202 | | | | | | | |
| 162.000 | | | | | | | | | 1.1374 | | | | | | |
| 165.000 | | | | | | | | | | .0781 | -.0730 | -.0723 | -.0338 | -.0185 | |
| 169.000 | | | | | | | | 1.2807 | | | | | | | |
| 174.000 | | | | | | | 1.0851 | | | | | | | | |
| 180.000 | 1.5291 | .9347 | .5913 | .4783 | .4257 | .3998 | | 1.1713 | | -.0106 | -.1381 | -.0447 | -.0322 | -.0362 | |
| 305.000 | | | .2644 | .3748 | .2798 | .2389 | | .1071 | | .0289 | | | | | |
| 320.000 | | | .2766 | .4722 | .2636 | .2665 | | -.0555 | | -.0510 | .0339 | -.0870 | -.1140 | .0034 | -.0997 |
| 340.000 | | | .3167 | .5556 | .2328 | .3436 | | .0195 | | -.0373 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0329 | .2451 | .5066 | .3279 | -.1850 | -.2555 | -.1204 | | -.0771 | -.1003 |
| 40.000 | -.1387 | .0883 | .2113 | -.1070 | -.2243 | -.0387 | -.1665 | | -.2145 | -.1892 |
| 70.000 | .0634 | -.0169 | -.0097 | -.0098 | .5216 | .0666 | .0242 | | | |
| 90.000 | .0719 | .0277 | -.0038 | .1542 | .0905 | .0479 | .0186 | | | |
| 105.000 | | | .0000 | .2159 | .0859 | -.0079 | -.0340 | | | |
| 110.000 | | | | | | | | -.0798 | | |
| 120.000 | .0280 | .0336 | .0320 | .2460 | .2000 | .0536 | -.0121 | -.0860 | | |
| 135.000 | | | .1601 | .2588 | .1817 | .0510 | .0333 | | | |
| 150.000 | -.0146 | .0090 | .1873 | .2240 | -.0082 | .1347 | .1998 | | | |
| 165.000 | -.0205 | | .1550 | | .4679 | .3997 | -.0288 | | | |
| 180.000 | -.0339 | -.0314 | .1095 | .1665 | | | | | | |
| 320.000 | .0365 | .1184 | .4499 | .2499 | -.1053 | -.1632 | -.1577 | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET836)

ALPHAO( 2) = -4.265 BETAO ( 2) = -4.183

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .70 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5268 | .7891 | .3693 | .6291 | .2426 | .5411 | | .0471 | | .0223 | .1566 | -.0138 | .0196 | -.0154 | -.0042 |
| 20.000 | | | .3827 | .6714 | .3578 | .5043 | | -.0804 | | .0864 | | | | | |
| 40.000 | | | .4590 | .7111 | .5545 | .2788 | | .2221 | | -.0301 | .0000 | .0000 | .0106 | .0961 | -.0012 |
| 55.000 | | | .6055 | .7092 | .6582 | .4029 | | .3620 | | .2131 | | | | | |
| 70.000 | | | .6729 | .5407 | .6105 | .4647 | | .3495 | | .0000 | .0389 | .0263 | .0186 | -.0262 | |
| 90.000 | | .9059 | .7160 | .4827 | .4994 | .4807 | | .3680 | | .0000 | .0752 | .0215 | -.0138 | -.0218 | |
| 120.000 | | | .7488 | .5692 | .4394 | .4931 | | .6318 | | .4325 | .1195 | -.0868 | -.0551 | -.0102 | |
| 140.000 | | | | | | | | | | .3961 | | | | | |
| 150.000 | | | .7016 | .5330 | .4627 | .4428 | | | | .2155 | -.0875 | -.0605 | -.0333 | -.0012 | |
| 151.000 | | | | | | | | | 1.0211 | | | | | | |
| 156.000 | | | | | | | | 1.1414 | | | | | | | |
| 162.000 | | | | | | | | | 1.1229 | | | | | | |
| 165.000 | | | | | | | | | | .0936 | -.0849 | -.0541 | -.0310 | -.0012 | |
| 169.000 | | | | | | | | 1.2558 | | | | | | | |
| 174.000 | | | | | | | 1.0597 | | | | | | | | |
| 180.000 | 1.5268 | .9512 | .6001 | .4901 | .4407 | .4020 | | 1.2127 | | -.0202 | -.1205 | -.0240 | -.0170 | -.0058 | |
| 305.000 | | | .3248 | .4187 | .3293 | .2513 | | .1437 | | .0385 | | | | | |
| 320.000 | | | .3403 | .5119 | .3034 | .3135 | | .0121 | | -.0290 | .0709 | -.0704 | -.0900 | -.0558 | -.0496 |
| 340.000 | | | .3700 | .5660 | .2432 | .3258 | | .0192 | | -.0594 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0478 | .2201 | .4569 | .2844 | -.1942 | -.2574 | -.1225 | | -.0948 | -.0997 |
| 40.000 | -.1199 | .0769 | .2221 | -.0546 | -.2142 | -.0531 | -.1682 | | -.1646 | -.1454 |
| 70.000 | .0400 | -.0319 | -.0283 | .0280 | .5056 | .0507 | .0048 | | | |
| 90.000 | .0514 | .0197 | -.0178 | .1454 | .0713 | .0350 | .0055 | | | |
| 105.000 | | | .0000 | .2011 | .0549 | -.0315 | -.0539 | | | |
| 110.000 | | | | | | | | -.0951 | | |
| 120.000 | .0348 | .0421 | .0287 | .2406 | .1852 | .0349 | -.0386 | -.1023 | | |
| 135.000 | | | .2031 | .2710 | .1771 | .0417 | .0244 | | | |
| 150.000 | -.0025 | .0133 | .2165 | .2445 | .0340 | .1949 | .1772 | | | |
| 165.000 | -.0074 | | .1818 | | .4219 | .3408 | -.0422 | | | |
| 180.000 | -.0182 | -.0195 | .1274 | .2301 | | | | | | |
| 320.000 | .0132 | .0887 | .3948 | .2301 | -.1219 | -.1853 | -.1777 | | | |

ARC97-019 1A81 LVAP(ALLML SEAL"D) ORB. FUSELAGE (RETB36)

ALPHAO( 2) = -4.235 BETAO ( 3) = .039

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5242 | .8235 | .3361 | .7084 | .3139 | .5099 | | .0420 | | -.0556 | .2001 | -.0827 | -.0738 | .0245 | -.0103 |
| 20.000 | | | .2993 | .7097 | .3381 | .4214 | | .0374 | | -.0361 | | | | | |
| 40.000 | | | .3731 | .6797 | .4281 | .4505 | | .1391 | | -.0886 | .0000 | .0000 | -.0328 | .0235 | .0390 |
| 55.000 | | | .4786 | .4093 | .4610 | .2986 | | .2900 | | .1372 | | | | | |
| 70.000 | | | .5395 | .3539 | .4412 | .3594 | | .3111 | | .0000 | -.0096 | -.0349 | -.0322 | -.0617 | |
| 90.000 | | .7563 | .5969 | .3648 | .3087 | .3187 | | .3095 | | .0000 | .0304 | -.0380 | -.0729 | -.0476 | |
| 120.000 | | | .6453 | .4841 | .3491 | .3255 | | .5562 | | .3410 | .0505 | -.1286 | -.0658 | -.0258 | |
| 140.000 | | | | | | | | | | .2586 | | | | | |
| 150.000 | | | .6438 | .5109 | .4364 | .3783 | | | | .1128 | -.0921 | -.0524 | -.0162 | -.0057 | |
| 151.000 | | | | | | | | | .8861 | | | | | | |
| 156.000 | | | | | | | | 1.0552 | | | | | | | |
| 162.000 | | | | | | | | | 1.0217 | | | | | | |
| 165.000 | | | | | | | | | | .0831 | -.1163 | -.0184 | .0059 | .0047 | |
| 169.000 | | | | | | | | 1.2482 | | | | | | | |
| 174.000 | | | | | | | 1.0942 | | | | | | | | |
| 180.000 | 1.5242 | .9351 | .6045 | .5083 | .4572 | .4099 | | 1.2587 | | -.0549 | -.0904 | -.0104 | .0155 | .0086 | |
| 305.000 | | | .4464 | .4754 | .4636 | .3442 | | .2357 | | .1083 | | | | | |
| 320.000 | | | .3342 | .5512 | .4118 | .4262 | | .0812 | | -.0042 | .1400 | -.0380 | -.0565 | -.0129 | -.0175 |
| 340.000 | | | .3439 | .6467 | .3355 | .3575 | | .0272 | | .0127 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0270 | .2494 | .3526 | .3401 | -.1643 | -.1486 | -.1601 | | -.1115 | -.1199 |
| 40.000 | -.0733 | .1360 | .2746 | -.0344 | -.2199 | -.1215 | -.1977 | | -.1232 | -.1095 |
| 70.000 | .0191 | -.0462 | -.0544 | .0589 | .4231 | .0302 | -.0197 | | | |
| 90.000 | .0269 | .0018 | -.0380 | .1232 | .0289 | .0148 | -.0001 | | | |
| 105.000 | | | .0000 | .1379 | -.0149 | -.0666 | -.0772 | | | |
| 110.000 | | | | | | | | -.1069 | | |
| 120.000 | -.0051 | .0249 | .0842 | .1662 | .1597 | .0022 | -.0745 | -.1346 | | |
| 135.000 | | | .1350 | .2810 | .1435 | .0580 | .0384 | | | |
| 150.000 | -.0139 | -.0076 | .0869 | .2833 | .1433 | .1420 | .1201 | | | |
| 165.000 | -.0087 | | .0124 | | .3571 | .2206 | -.1141 | | | |
| 180.000 | -.0083 | -.0118 | -.0030 | .3527 | | | | | | |
| 320.000 | -.0430 | .1192 | .3804 | .0877 | -.1614 | -.1516 | -.2169 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET838)

ALPHA0( 2) = -4.200 BETA0 ( 4) = 4.234

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5139 | .7984 | .3050 | .6641 | .2659 | .5292 | | -.0054 | | .0397 | .0799 | -.0277 | -.1514 | .0143 | .0003 |
| 20.000 | | | .2852 | .6135 | .2481 | .2752 | | .0032 | | -.0785 | | | | | |
| 40.000 | | | .2605 | .5497 | .3044 | .2907 | | .0499 | | -.0372 | .0000 | .0000 | -.0583 | .0184 | .0026 |
| 55.000 | | | .3332 | .2993 | .3323 | .1514 | | .1813 | | .0560 | | | | | |
| 70.000 | | | .3888 | .2452 | .2902 | .1556 | | .2543 | | .0000 | -.0523 | -.0915 | -.0734 | -.0682 | |
| 90.000 | | .5968 | .4403 | .2329 | .1789 | .1757 | | .1698 | | .0000 | -.0235 | -.0866 | -.1219 | -.0638 | |
| 120.000 | | | .5042 | .3620 | .2402 | .2055 | | .4000 | | .1803 | -.0549 | -.1687 | -.0801 | -.0914 | |
| 140.000 | | | | | | | | | | .0653 | | | | | |
| 150.000 | | | .5413 | .4453 | .3745 | .3121 | | | | .0365 | -.1514 | -.0547 | -.0220 | -.0259 | |
| 151.000 | | | | | | | | | .8995 | | | | | | |
| 156.000 | | | | | | | | .9619 | | | | | | | |
| 162.000 | | | | | | | | | .9300 | | | | | | |
| 165.000 | | | | | | | | | | .0125 | -.1161 | -.0509 | -.0175 | -.0157 | |
| 169.000 | | | | | | | | 1.1857 | | | | | | | |
| 174.000 | | | | | | | 1.0415 | | | | | | | | |
| 180.000 | 1.5139 | .8974 | .5793 | .4860 | .4331 | .3899 | | 1.2260 | | -.0442 | -.1281 | -.0323 | -.0204 | -.0115 | |
| 305.000 | | | .5669 | .4927 | .6775 | .4312 | | .3120 | | .1952 | | | | | |
| 320.000 | | | .3748 | .7426 | .5978 | .2823 | | .1784 | | -.0215 | .1612 | -.0458 | -.0602 | .0320 | -.0076 |
| 340.000 | | | .3064 | .7057 | .3799 | .5110 | | -.1109 | | .0864 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0963 | .1682 | .3000 | .3791 | -.1584 | -.1639 | -.1404 | | -.1058 | -.1091 |
| 40.000 | -.0187 | .0579 | .4217 | .0438 | -.2164 | -.1652 | -.1574 | | -.1169 | -.1221 |
| 70.000 | .0108 | -.0514 | -.0557 | .0635 | .2680 | -.0001 | -.0494 | | | |
| 90.000 | .0121 | -.0066 | -.0377 | .1279 | -.0155 | -.0224 | -.0382 | | | |
| 105.000 | | | .0000 | .0895 | -.0515 | -.1026 | -.1093 | | | |
| 110.000 | | | | | | | | -.1423 | | |
| 120.000 | -.0547 | -.0117 | .1256 | .0750 | .0609 | -.0549 | -.1312 | -.1832 | | |
| 135.000 | | | .1351 | .2188 | .0940 | -.0111 | -.0294 | | | |
| 150.000 | -.0344 | -.0442 | .0855 | .2411 | .1071 | .0331 | .0210 | | | |
| 165.000 | -.0269 | | .0737 | | .2257 | .1172 | -.1453 | | | |
| 180.000 | -.0193 | -.0239 | .1335 | .2405 | | | | | | |
| 320.000 | -.0328 | .1791 | .3276 | -.0804 | -.1618 | -.1459 | -.1839 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB36)

ALPHAO( 2) = -4.192 BETAO ( 5) = 6.302

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4676 | .8078 | .3264 | .6555 | .2754 | .4327 | | .0267 | | .0414 | .0130 | -.0562 | -.2042 | -.0001 | .0108 |
| 20.000 | | | .3083 | .5777 | .1991 | .2338 | | -.0054 | | -.0816 | | | | | |
| 40.000 | | | .2377 | .4919 | .2172 | .2316 | | -.0150 | | -.0445 | .0000 | .0000 | -.0656 | -.0341 | -.0593 |
| 55.000 | | | .2581 | .2615 | .2459 | .1575 | | .1339 | | .0305 | | | | | |
| 70.000 | | | .3122 | .2223 | .2249 | .1176 | | .1509 | | .0000 | -.0662 | -.0941 | -.0855 | -.0595 | |
| 90.000 | | .5088 | .3667 | .1826 | .1564 | .1290 | | .1048 | | .0000 | -.0336 | -.0983 | -.1281 | -.0717 | |
| 120.000 | | | .4392 | .3158 | .2005 | .1626 | | .3482 | | .1262 | -.0834 | -.1952 | -.0877 | -.1179 | |
| 140.000 | | | | | | | | | | .0179 | | | | | |
| 150.000 | | | .4957 | .4180 | .3504 | .2921 | | | | .0030 | -.1626 | -.0781 | -.0540 | -.0357 | |
| 151.000 | | | | | | | | | .6157 | | | | | | |
| 156.000 | | | | | | | | 1.0045 | | | | | | | |
| 162.000 | | | | | | | | | .9000 | | | | | | |
| 165.000 | | | | | | | | | | -.0714 | -.1296 | -.0598 | -.0396 | -.0344 | |
| 169.000 | | | | | | | | 1.1608 | | | | | | | |
| 174.000 | | | | | | | 1.0189 | | | | | | | | |
| 180.000 | 1.4676 | .8599 | .5665 | .4762 | .4301 | .4029 | | 1.1799 | | -.0339 | -.1377 | -.0492 | -.0492 | -.0334 | |
| 305.000 | | | .6313 | .8031 | .7344 | .4624 | | .3373 | | .2255 | | | | | |
| 320.000 | | | .4401 | .7912 | .6199 | .2789 | | .2329 | | .0153 | .1893 | -.0389 | -.0296 | .0435 | -.0279 |
| 340.000 | | | .3696 | .7109 | .4068 | .4951 | | -.0858 | | .1246 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0678 | -.0010 | .3319 | .2964 | -.1783 | -.1403 | -.1309 | | -.0988 | -.1030 |
| 40.000 | .0003 | .0458 | .3987 | .1221 | -.2074 | -.1465 | -.1411 | | -.1141 | -.1190 |
| 70.000 | -.0007 | -.0633 | -.0643 | .0309 | .2226 | -.0099 | -.0542 | | | |
| 90.000 | -.0020 | -.0154 | -.0502 | .1425 | -.0106 | -.0591 | -.0643 | | | |
| 105.000 | | | .0000 | .1018 | -.0630 | -.1098 | -.1195 | | | |
| 110.000 | | | | | | | | -.1518 | | |
| 120.000 | -.0685 | -.0269 | .0985 | .0068 | .0143 | -.1038 | -.1590 | -.1992 | | |
| 135.000 | | | .1074 | .1597 | .0618 | -.0389 | -.0530 | | | |
| 150.000 | -.0645 | -.0695 | .0618 | .1918 | .0768 | -.0225 | -.0248 | | | |
| 165.000 | -.0459 | | .0670 | | .1564 | .0876 | -.1476 | | | |
| 180.000 | -.0311 | -.0324 | .1185 | .1725 | | | | | | |
| 320.000 | -.0485 | .1448 | .3512 | -.1288 | -.1550 | -.1038 | -.1731 | | | |

ARC97-019 TAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB36)

ALPHAO( 3) = -2.186 BETAO ( 1) = -6.258

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4768 | .7719 | .4278 | .5867 | .2183 | .5052 | | .0687 | | .0459 | -.0122 | .0289 | -.0077 | -.0206 | .0476 |
| 20.000 | | | .4735 | .6800 | .3783 | .4639 | | -.0853 | | .1145 | | | | | |
| 40.000 | | | .5812 | .7608 | .5941 | .2628 | | .2296 | | -.0099 | .0000 | .0000 | -.0132 | .0906 | .0906 |
| 55.000 | | | .6460 | .7669 | .7031 | .4155 | | .3543 | | .2155 | | | | | |
| 70.000 | | | .7016 | .6765 | .6531 | .4671 | | .3210 | | .0000 | .0390 | .0390 | .0305 | -.0247 | |
| 90.000 | | .9215 | .7368 | .5983 | .5784 | .4867 | | .3524 | | .0000 | .0688 | .0341 | .0039 | -.0292 | |
| 120.000 | | | .7403 | .5694 | .4847 | .4905 | | .5213 | | .4261 | .1251 | -.0758 | -.0719 | -.0540 | |
| 140.000 | | | | | | | | | | .4090 | | | | | |
| 150.000 | | | .6591 | .4813 | .4261 | .4190 | | | | .2345 | -.1219 | -.0931 | -.0752 | -.0463 | |
| 151.000 | | | | | | | | | 1.0097 | | | | | | |
| 155.000 | | | | | | | | 1.1290 | | | | | | | |
| 162.000 | | | | | | | | | 1.0859 | | | | | | |
| 165.000 | | | | | | | | | | .0506 | -.0954 | -.0983 | -.0649 | -.0457 | |
| 169.000 | | | | | | | | 1.2007 | | | | | | | |
| 174.000 | | | | | | | .9895 | | | | | | | | |
| 180.000 | 1.4768 | .8588 | .5307 | .4213 | .3706 | .3530 | | 1.0916 | | -.0309 | -.1556 | -.0732 | -.0578 | -.0581 | |
| 305.000 | | | .3021 | .3190 | .2473 | .2145 | | .0818 | | .0055 | | | | | |
| 320.000 | | | .3941 | .4171 | .2275 | .2395 | | -.0638 | | -.0805 | .0160 | -.1085 | -.1371 | -.0303 | -.0932 |
| 340.000 | | | .4059 | .4893 | .1873 | .3037 | | .0035 | | -.0941 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0365 | .2956 | .4954 | .3076 | -.1788 | -.2345 | -.1050 | | -.0652 | -.0864 |
| 40.000 | -.1030 | .1436 | .2426 | -.0841 | -.2175 | -.0171 | -.1560 | | -.1980 | -.1481 |
| 70.000 | .0401 | -.0355 | -.0290 | -.0454 | .4652 | .0423 | .0058 | | | |
| 90.000 | .0457 | .0064 | -.0241 | .1175 | .0698 | .0292 | -.0004 | | | |
| 105.000 | | | .0000 | .1887 | .0767 | -.0200 | -.0448 | | | |
| 110.000 | | | | | | | | -.0942 | | |
| 120.000 | -.0087 | -.0047 | -.0165 | .2056 | .1666 | .0339 | -.0272 | -.0942 | | |
| 135.000 | | | .1349 | .2079 | .1453 | .0222 | -.0092 | | | |
| 150.000 | -.0359 | -.0172 | .1720 | .1699 | -.0440 | .0546 | .1555 | | | |
| 165.000 | -.0437 | | .1516 | | .3994 | .3431 | -.0383 | | | |
| 180.000 | -.0562 | -.0520 | .1119 | .1210 | | | | | | |
| 420.000 | .0345 | .1352 | .4256 | .2686 | -.0915 | -.1543 | -.1491 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET836)

ALPHAO( 3) = -2.175 BETAO ( 2) = -2.080

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4616 | .7863 | .6190 | .5286 | .2151 | .4854 | | .0139 | | -.0548 | .1888 | -.0858 | -.0590 | -.0025 | .0247 |
| 20.000 | | | .6408 | .5597 | .2585 | .4501 | | -.0427 | | .0195 | | | | | |
| 40.000 | | | .6392 | .5898 | .4107 | .3358 | | .1638 | | -.0683 | .0000 | .0000 | -.0278 | .0569 | -.0290 |
| 55.000 | | | .6104 | .5779 | .4933 | .3312 | | .2998 | | .1455 | | | | | |
| 70.000 | | | .6063 | .5212 | .4626 | .3786 | | .2901 | | .0000 | -.0081 | -.0301 | -.0307 | -.0696 | |
| 90.000 | | .7812 | .6264 | .4770 | .4123 | .4027 | | .3049 | | .0000 | .0262 | -.0310 | -.0612 | -.0670 | |
| 120.000 | | | .6520 | .5000 | .3879 | .3972 | | .5417 | | .3601 | .0570 | -.1206 | -.0889 | -.0465 | |
| 140.000 | | | | | | | | | | .3196 | | | | | |
| 150.000 | | | .6152 | .4779 | .4107 | .3735 | | | | .1457 | -.1195 | -.0892 | -.0526 | -.0257 | |
| 151.000 | | | | | | | | | .9186 | | | | | | |
| 156.000 | | | | | | | | 1.0110 | | | | | | | |
| 162.000 | | | | | | | | | 1.0532 | | | | | | |
| 165.000 | | | | | | | | | | .0618 | -.1299 | -.0554 | -.0371 | -.0241 | |
| 169.000 | | | | | | | | 1.1620 | | | | | | | |
| 174.000 | | | | | | | .9757 | | | | | | | | |
| 180.000 | 1.4616 | .8742 | .5423 | .4523 | .4014 | .3607 | | 1.1895 | | -.0661 | -.1282 | -.0532 | -.0172 | -.0221 | |
| 305.000 | | | .4800 | .4164 | .3735 | .2207 | | .1593 | | .0398 | | | | | |
| 320.000 | | | .5888 | .4972 | .3328 | .3095 | | .0266 | | -.0230 | .0861 | -.0741 | -.1039 | -.0588 | -.0208 |
| 340.000 | | | .6019 | .5077 | .2421 | .3043 | | .0250 | | -.0476 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0329 | .0860 | .4470 | .3131 | -.1680 | -.2041 | -.1297 | | -.0590 | -.1207 |
| 40.000 | -.0447 | .1161 | .2947 | -.0380 | -.1992 | -.0777 | -.1624 | | -.1085 | -.1184 |
| 70.000 | -.0041 | -.0644 | -.0626 | .0209 | .4588 | .0033 | -.0335 | | | |
| 90.000 | .0041 | -.0179 | -.0495 | .0937 | .0240 | -.0085 | -.0325 | | | |
| 105.000 | | | .0000 | .1499 | .0017 | -.0692 | -.0901 | | | |
| 110.000 | | | | | | | | -.1258 | | |
| 120.000 | -.0077 | .0095 | .0964 | .1911 | .1504 | .0028 | -.0731 | -.1304 | | |
| 135.000 | | | .1749 | .2383 | .1517 | .0192 | .0120 | | | |
| 150.000 | -.0300 | -.0157 | .1637 | .2344 | .0591 | .1474 | .1150 | | | |
| 155.000 | -.0319 | | .0885 | | .3398 | .2472 | -.0774 | | | |
| 180.000 | -.0349 | -.0383 | -.0094 | .2876 | | | | | | |
| 320.000 | .0123 | .1719 | .3591 | .2383 | -.1305 | -.1549 | -.1968 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB36)

ALPHAO( 3) = -2.146 BETAO ( 3) = 2.137

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5120 | .7744 | .5895 | .4662 | .1846 | .5191 | | -.0283 | | -.0150 | .1451 | -.0410 | -.1156 | -.0078 | -.0198 |
| 20.000 | | | .5709 | .4691 | .2053 | .2852 | | -.0160 | | -.0693 | | | | | |
| 40.000 | | | .5204 | .4790 | .2957 | .3069 | | .0652 | | -.0815 | .0000 | .0000 | -.0700 | -.0055 | .0378 |
| 55.000 | | | .4784 | .4386 | .3520 | .1857 | | .1958 | | .0649 | | | | | |
| 70.000 | | | .4321 | .3703 | .3287 | .1811 | | .2324 | | .0000 | -.0556 | -.0831 | -.0729 | -.1009 | |
| 90.000 | | .6221 | .4724 | .3248 | .2795 | .2094 | | .2369 | | .0000 | -.0187 | -.0816 | -.1127 | -.0826 | |
| 120.000 | | | .5236 | .3838 | .2781 | .2586 | | .4059 | | .2539 | .0004 | -.1715 | -.0935 | -.0659 | |
| 140.000 | | | | | | | | | | .1031 | | | | | |
| 150.000 | | | .5319 | .4245 | .3569 | .3001 | | | | .0668 | -.1410 | -.0668 | -.0440 | -.0385 | |
| 151.000 | | | | | | | | | .7708 | | | | | | |
| 158.000 | | | | | | | | 1.0375 | | | | | | | |
| 162.000 | | | | | | | | | .9219 | | | | | | |
| 185.000 | | | | | | | | | | .0354 | -.1365 | -.0527 | -.0225 | -.0294 | |
| 189.000 | | | | | | | | 1.1319 | | | | | | | |
| 174.000 | | | | | | | 1.0027 | | | | | | | | |
| 180.000 | 1.5120 | .8447 | .5229 | .4377 | .3899 | .3413 | | 1.1803 | | -.0688 | -.1232 | -.0534 | -.0190 | -.0257 | |
| 305.000 | | | .5479 | .5024 | .5133 | .3569 | | .2577 | | .1345 | | | | | |
| 320.000 | | | .5964 | .5281 | .4274 | .3296 | | .1053 | | -.0559 | .1235 | -.0777 | -.0781 | .0028 | -.0542 |
| 340.000 | | | .5896 | .4745 | .2502 | .5428 | | -.1251 | | .0490 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0939 | .1937 | .3581 | .2609 | -.1392 | -.1579 | -.1402 | | -.1182 | -.1191 |
| 40.000 | -.0388 | .0683 | .3581 | .0514 | -.2208 | -.1632 | -.1938 | | -.1142 | -.1129 |
| 70.000 | -.0176 | -.0607 | -.0671 | .0351 | .2742 | -.0127 | -.0561 | | | |
| 90.000 | -.0126 | -.0215 | -.0480 | .0893 | -.0061 | -.0219 | -.0394 | | | |
| 105.000 | | | .0000 | .1035 | -.0481 | -.0989 | -.1101 | | | |
| 110.000 | | | | | | | | -.1386 | | |
| 120.000 | -.0847 | -.0122 | .0966 | .1204 | .1083 | -.0329 | -.1082 | -.1694 | | |
| 135.000 | | | .1498 | .2270 | .1090 | .0070 | -.0119 | | | |
| 150.000 | -.0444 | -.0487 | .1155 | .2280 | .1112 | .0653 | .0391 | | | |
| 165.000 | -.0411 | | .0197 | | .2522 | .1396 | -.1337 | | | |
| 180.000 | -.0395 | -.0421 | .0732 | .2742 | | | | | | |
| 320.000 | -.0382 | .1521 | .3427 | -.0228 | -.1920 | -.1481 | -.1860 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RET838)

ALPHA0( 3) = -2.184 BETA0 ( 4) = 6.280

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0480 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4343 | .7929 | .4848 | .5884 | .1894 | .4177 | | .0179 | | .0252 | .0011 | -.0869 | -.2048 | -.0308 | -.0440 |
| 80.000 | | | .4879 | .4810 | .1248 | .2184 | | -.0350 | | -.0898 | | | | | |
| 40.000 | | | .3432 | .4084 | .1532 | .2083 | | -.0291 | | -.0799 | .0000 | .0000 | -.0855 | -.0441 | -.0770 |
| 55.000 | | | .2888 | .3459 | .1952 | .1435 | | .1108 | | .0057 | | | | | |
| 70.000 | | | .2784 | .2408 | .2148 | .0865 | | .1383 | | .0000 | -.0857 | -.1122 | -.0993 | -.0977 | |
| 90.000 | | .4780 | .3329 | .1962 | .1681 | .1127 | | .0928 | | .0000 | -.0527 | -.1143 | -.1429 | -.0938 | |
| 120.000 | | | .3958 | .2744 | .1687 | .1564 | | .3271 | | .1085 | -.0973 | -.1932 | -.1005 | -.1288 | |
| 140.000 | | | | | | | | | | .0069 | | | | | |
| 150.000 | | | .4380 | .3842 | .3018 | .2480 | | | | -.0083 | -.1786 | -.0986 | -.0771 | -.0538 | |
| 151.000 | | | | | | | | | .5809 | | | | | | |
| 156.000 | | | | | | | | .9230 | | | | | | | |
| 162.000 | | | | | | | | | .8568 | | | | | | |
| 165.000 | | | | | | | | | | -.0909 | -.1520 | -.0835 | -.0643 | -.0462 | |
| 169.000 | | | | | | | | 1.0886 | | | | | | | |
| 174.000 | | | | | | | .9376 | | | | | | | | |
| 180.000 | 1.4343 | .7830 | .5019 | .4202 | .3783 | .3517 | | 1.1026 | | -.0559 | -.1553 | -.0803 | -.0742 | -.0570 | |
| 305.000 | | | .6849 | .7617 | .6943 | .4395 | | .3066 | | .2034 | | | | | |
| 320.000 | | | .6458 | .7386 | .5493 | .2749 | | .2204 | | .0063 | .1247 | -.0662 | -.0476 | .0454 | -.0296 |
| 340.000 | | | .6113 | .6433 | .3287 | .4177 | | -.0904 | | .1092 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0848 | .0378 | .3315 | .3063 | -.1983 | -.1478 | -.1325 | | -.0959 | -.0988 |
| 40.000 | .0084 | .0814 | .3922 | .1296 | -.2042 | -.1455 | -.1390 | | -.1063 | -.1145 |
| 70.000 | -.0250 | -.0829 | -.0852 | .0239 | .2113 | -.0399 | -.0681 | | | |
| 90.000 | -.0250 | -.0338 | -.0509 | .1010 | -.0402 | -.0737 | -.0766 | | | |
| 105.000 | | | .0000 | .0705 | -.0819 | -.1278 | -.1305 | | | |
| 110.000 | | | | | | | | -.1651 | | |
| 120.000 | -.1012 | -.0520 | .0718 | -.0025 | .0073 | -.1063 | -.1658 | -.1995 | | |
| 135.000 | | | .0915 | .1250 | .0444 | -.0563 | -.0821 | | | |
| 150.000 | -.0832 | -.0871 | .0849 | .1499 | .0572 | -.0504 | -.0547 | | | |
| 165.000 | -.0868 | | .0633 | | .1106 | .0434 | -.1550 | | | |
| 180.000 | -.0538 | -.0958 | .1053 | .1283 | | | | | | |
| 320.000 | -.0440 | .1595 | .3286 | -.1071 | -.1524 | -.1086 | -.1668 | | | |

ARC97-019 IA81 LVAP(ALUM. SEALED) ORB. FUSELAGE (RETB38)

ALPHA0( %) = -.088 BETA0 ( !) = -6.288

SECTION ( !)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0480 | .0700 | .1120 | .1500 | .1880 | .1770 | .2040 | .2810 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4240 | .7875 | .8722 | .9158 | .1885 | .4790 | | .0543 | | .0335 | -.0173 | .0070 | -.0350 | -.0193 | .0335 |
| 20.000 | | | .7141 | .8311 | .3180 | .4098 | | -.0914 | | .1018 | | | | | |
| 40.000 | | | .7838 | .7357 | .5480 | .2823 | | .2159 | | -.0169 | .0090 | .0000 | -.0337 | .0633 | .0319 |
| 55.000 | | | .7057 | .7594 | .6702 | .3886 | | .3199 | | .1892 | | | | | |
| 70.000 | | | .7515 | .6821 | .8231 | .4341 | | .2962 | | .0000 | .0138 | .0080 | .0132 | -.0284 | |
| 90.000 | | .0832 | .7326 | .8119 | .5561 | .4524 | | .3206 | | .0000 | .0498 | .0148 | -.0125 | -.0479 | |
| 120.000 | | | .7010 | .5535 | .4589 | .4367 | | .4351 | | .3959 | .1059 | -.0861 | -.0993 | -.0893 | |
| 140.000 | | | | | | | | | | .3827 | | | | | |
| 150.000 | | | .6066 | .4361 | .3845 | .3684 | | | | .2155 | -.1480 | -.1192 | -.1018 | -.0708 | |
| 151.000 | | | | | | | | | .8950 | | | | | | |
| 158.000 | | | | | | | | 1.0303 | | | | | | | |
| 162.000 | | | | | | | | | 1.0300 | | | | | | |
| 165.000 | | | | | | | | | | .0219 | -.1184 | -.1218 | -.0325 | -.0714 | |
| 168.300 | | | | | | | | 1.1034 | | | | | | | |
| 174.000 | | | | | | | .8769 | | | | | | | | |
| 180.000 | 1.4240 | .7915 | .4720 | .3878 | .3257 | .3068 | | 1.0068 | | -.0513 | -.1732 | -.0993 | -.0861 | -.0747 | |
| 305.000 | | | .4170 | .2733 | .2009 | .1800 | | .0601 | | -.0205 | | | | | |
| 320.000 | | | .5634 | .3594 | .1768 | .2063 | | -.0667 | | -.1042 | -.0063 | -.1295 | -.1555 | -.0206 | -.0855 |
| 340.000 | | | .6788 | .4204 | .1594 | .2904 | | .0027 | | -.0944 | | | | | |

| X/LB | .8520 | .7200 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| 000 | -.0314 | .3109 | .4890 | .3052 | -.1800 | -.2358 | -.0902 | | -.0470 | -.0765 |
| 40.000 | -.0104 | .1850 | .2533 | -.0952 | -.2066 | -.0090 | -.1475 | | -.2011 | -.1360 |
| 70.000 | .0195 | -.0505 | -.0505 | -.0689 | .4060 | .0251 | -.0118 | | | |
| 90.000 | .0198 | -.0134 | -.0433 | .0199 | .0707 | .0185 | -.0260 | | | |
| 105.000 | | | .0000 | .1734 | .0845 | -.0228 | -.0640 | | | |
| 118.000 | | | | | | | | -.1128 | | |
| 120.000 | -.0531 | -.0472 | -.0548 | .1688 | .1307 | .0178 | -.0381 | -.1042 | | |
| 135.000 | | | .1283 | .1940 | .1111 | -.0024 | -.0355 | | | |
| 150.000 | -.0527 | -.0452 | .1491 | .1153 | -.0750 | .0143 | .0778 | | | |
| 165.000 | -.0823 | | .1274 | | .3302 | .2982 | -.0498 | | | |
| 180.000 | -.0750 | -.0712 | .0981 | .0789 | | | | | | |
| 320.000 | .0478 | .1629 | .4588 | .2515 | -.0799 | -.1448 | -.1370 | | | |

ARC97-0.9 IA81 LVAP(ALL HL SEALED) ORB. FUSELAGE (RETB38)

ALPHA0( A) = -.095 BETA0 ( B) = -4.207

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0480 | .0700 | .1120 | .1580 | .1880 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4041 | .8073 | .6782 | .4418 | .1782 | .5205 | | .0365 | | -.0038 | .1237 | -.0451 | -.0192 | -.0490 | -.0174 |
| 20.000 | | | .6954 | .5244 | .2824 | .4472 | | -.1049 | | .0659 | | | | | |
| 40.000 | | | .7398 | .6176 | .5126 | .2849 | | .1992 | | -.0401 | .0000 | .0000 | -.0295 | .0520 | .0006 |
| 55.000 | | | .7248 | .6308 | .6176 | .3497 | | .2995 | | .1601 | | | | | |
| 70.000 | | | .6810 | .5689 | .5577 | .3956 | | .2761 | | .0000 | .0008 | -.0128 | -.0237 | -.0648 | |
| 90.000 | | .8175 | .6685 | .5219 | .4837 | .4187 | | .3014 | | .0000 | .0367 | -.0102 | -.0474 | -.0709 | |
| 120.000 | | | .6525 | .5023 | .3995 | .4135 | | .4409 | | .3668 | .0865 | -.1107 | -.1145 | -.0818 | |
| 140.000 | | | | | | | | | | .3504 | | | | | |
| 150.000 | | | .5825 | .4261 | .3700 | .3597 | | | | .1771 | -.1350 | -.1168 | -.1001 | -.0498 | |
| 151.000 | | | | | | | | | .9214 | | | | | | |
| 158.000 | | | | | | | | 1.0307 | | | | | | | |
| 162.000 | | | | | | | | | 1.0115 | | | | | | |
| 165.000 | | | | | | | | | | .0409 | -.1269 | -.1158 | -.0892 | -.0475 | |
| 169.000 | | | | | | | | 1.0934 | | | | | | | |
| 174.000 | | | | | | | .8968 | | | | | | | | |
| 180.000 | 1.4041 | .8073 | .4780 | .3812 | .3397 | .3125 | | 1.0617 | | -.0583 | -.1589 | -.0811 | -.0664 | -.0511 | |
| 305.000 | | | .4774 | .3187 | .2470 | .1592 | | .0932 | | -.0063 | | | | | |
| 320.000 | | | .3881 | .3915 | .2052 | .2422 | | -.0078 | | -.0593 | .0348 | -.1148 | -.1395 | -.0871 | -.0448 |
| 340.000 | | | .6785 | .4017 | .2010 | .2787 | | -.0014 | | -.0803 | | | | | |

| X/LB | .0520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0484 | .2383 | .5041 | .3285 | -.1487 | -.2421 | -.1245 | | -.0401 | -.0969 |
| 40.000 | .0330 | .1119 | .2822 | -.0332 | -.1923 | -.0465 | -.1565 | | -.1762 | -.1194 |
| 70.000 | -.0105 | -.0734 | -.0714 | -.0549 | .4372 | -.0006 | -.0313 | | | |
| 90.000 | -.0010 | -.0285 | -.0585 | .0857 | .0243 | -.0088 | -.0391 | | | |
| 105.000 | | | .0000 | .1275 | .0308 | -.0563 | -.0810 | | | |
| 110.000 | | | | | | | | -.1245 | | |
| 120.000 | -.0282 | -.0244 | -.0162 | .1635 | .1314 | -.0012 | -.0637 | -.1212 | | |
| 135.000 | | | .1281 | .1737 | .1147 | -.0074 | -.0473 | | | |
| 150.000 | -.0459 | -.0348 | .1531 | .1578 | -.0380 | .0750 | .1106 | | | |
| 165.000 | -.0547 | | .1422 | | .3090 | .2551 | -.0682 | | | |
| 180.000 | -.0828 | -.0582 | .1185 | .1544 | | | | | | |
| 320.000 | .0818 | .1018 | .4582 | .2723 | -.1195 | -.1942 | -.1853 | | | |

ARC97-010 IABI LVAP(ALUM. SEALED) ORB. FUSELAGE (RET836)

ALPHA0( 4) = -.004 BETA0 ( 3) = .007

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0000 | .0230 | .0460 | .0700 | .1120 | .1500 | .1860 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4244 | .0000 | .6758 | .4334 | .1877 | .2318 | | .0094 | | .0533 | .1251 | -.0676 | -.1089 | -.0277 | .0107 |
| 20.000 | | | .6411 | .4670 | .1573 | .2681 | | -.0332 | | -.0416 | | | | | |
| 40.000 | | | .6194 | .5025 | .2944 | .2312 | | .1312 | | -.0967 | .0000 | .0000 | -.0617 | .0088 | .0234 |
| 55.000 | | | .5715 | .4532 | .3780 | .2499 | | .2483 | | .0943 | | | | | |
| 70.000 | | | .5555 | .4046 | .3471 | .2945 | | .2184 | | .0000 | -.0452 | -.0883 | -.0717 | -.1095 | |
| 90.000 | | .6788 | .5539 | .3770 | .3122 | .2901 | | .2293 | | .0000 | -.0038 | -.0624 | -.1070 | -.1041 | |
| 120.000 | | | .5603 | .4159 | .3027 | .2950 | | .4541 | | .2902 | .0166 | -.1535 | -.1191 | -.0710 | |
| 140.000 | | | | | | | | | | .2513 | | | | | |
| 150.000 | | | .5332 | .4084 | .3488 | .3466 | | | | .0927 | -.1368 | -.1118 | -.0694 | -.0502 | |
| 151.000 | | | | | | | | | .7824 | | | | | | |
| 156.000 | | | | | | | | .8541 | | | | | | | |
| 162.000 | | | | | | | | | .9488 | | | | | | |
| 165.000 | | | | | | | | | | .0322 | -.1548 | -.0717 | -.0483 | -.0440 | |
| 169.000 | | | | | | | | 1.0850 | | | | | | | |
| 174.000 | | | | | | | .8758 | | | | | | | | |
| 180.000 | 1.4244 | .7916 | .4884 | .4023 | .3617 | .3193 | | 1.1093 | | -.0886 | -.1359 | -.0556 | -.0364 | -.0433 | |
| 305.000 | | | .8419 | .4401 | .2888 | .2952 | | .1764 | | .0784 | | | | | |
| 320.000 | | | .7173 | .4867 | .1673 | .3426 | | .0703 | | -.0724 | .1111 | -.1028 | -.0794 | -.0430 | -.0413 |
| 340.000 | | | .7282 | .4215 | .1754 | .1926 | | -.0070 | | .0535 | | | | | |

| X/LB | .0520 | .7290 | .7790 | .8210 | .8780 | .9210 | .9700 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0312 | .2027 | .3378 | .2987 | -.1889 | -.1423 | -.1381 | | -.1018 | -.1090 |
| 40.000 | -.0846 | .1582 | .2613 | .0317 | -.2062 | -.1873 | -.1770 | | -.0874 | -.1129 |
| 70.000 | -.0358 | -.0852 | -.0881 | .0160 | .2575 | -.0214 | -.0581 | | | |
| 90.000 | -.0256 | -.0448 | -.0780 | .0 3 | -.0125 | -.0342 | -.0454 | | | |
| 105.000 | | | .0000 | .:119 | -.0391 | -.0922 | -.1084 | | | |
| 110.000 | | | | | | | | -.1484 | | |
| 120.000 | -.0410 | -.0178 | .0845 | .1202 | .1258 | -.0173 | -.0870 | -.1470 | | |
| 135.000 | | | .0881 | .2080 | .1051 | .[illegible] | -.0192 | | | |
| 150.000 | -.0883 | -.0471 | .0731 | .2162 | .0933 | .0762 | .0086 | | | |
| 165.000 | -.[illegible] | | -.0811 | | .2738 | .1585 | -.1281 | | | |
| 180.000 | -.0531 | -.0353 | -.0100 | .2811 | | | | | | |
| 320.000 | -.0125 | .1007 | .3884 | .1199 | -.1486 | -.1480 | -.2032 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET836)

ALPHAO( 4) = -.082 BETAO ( 4) = 4.192

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0060 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | :.4119 | .7593 | .6491 | .5263 | .1721 | .4504 | | -.0060 | | -.0085 | .0432 | -.0879 | -.1681 | -.0189 | -.0557 |
| 20.000 | | | .5971 | .4828 | .1523 | .2334 | | .0002 | | -.1196 | | | | | |
| 40.000 | | | .4891 | .4530 | .2132 | .2347 | | .0155 | | -.0805 | .0000 | .0000 | -.0981 | -.0211 | -.0237 |
| 55.000 | | | .4105 | .3870 | .2620 | .1392 | | .1311 | | .0133 | | | | | |
| 70.000 | | | .3481 | .3209 | .2533 | .0974 | | .1929 | | .0000 | -.0925 | -.1168 | -.1055 | -.1289 | |
| 90.000 | | .5223 | .3677 | .2695 | .2148 | .1434 | | .1558 | | .0000 | -.0504 | -.1135 | -.1405 | -.1113 | |
| 120.000 | | | .4147 | .2899 | .2010 | .1965 | | .3473 | | .1487 | -.0300 | -.1912 | -.1193 | -.0997 | |
| 140.000 | | | | | | | | | | .0467 | | | | | |
| 150.000 | | | .4351 | .3394 | .2859 | .2376 | | | | .0050 | -.1792 | -.0988 | -.0657 | -.0649 | |
| 151.000 | | | | | | | | | .8351 | | | | | | |
| 158.000 | | | | | | | | .8235 | | | | | | | |
| 162.000 | | | | | | | | | .8545 | | | | | | |
| 165.000 | | | | | | | | | | -.0319 | -.1514 | -.0946 | -.0523 | -.0570 | |
| 169.000 | | | | | | | | 1.0653 | | | | | | | |
| 174.000 | | | | | | | .8987 | | | | | | | | |
| 180.000 | 1.4119 | .7743 | .4667 | .3684 | .3319 | .3070 | | 1.0871 | | -.0831 | -.1640 | -.0827 | -.0693 | -.0554 | |
| 305.000 | | | .6437 | .6436 | .5983 | .3754 | | .2493 | | .1432 | | | | | |
| 320.000 | | | .6772 | .6635 | .4846 | .3037 | | .1539 | | -.0485 | .1221 | -.0914 | -.0831 | -.0008 | -.0220 |
| 340.000 | | | .6833 | .5773 | .2885 | .3879 | | -.1209 | | .0580 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0858 | .2309 | .3414 | .3460 | -.1657 | -.1538 | -.1350 | | -.1018 | -.1086 |
| 40.000 | -.0338 | .0653 | .4119 | .0737 | -.2050 | -.1467 | -.1638 | | -.0982 | -.1060 |
| 70.000 | -.0361 | -.0879 | -.0909 | .0053 | .2182 | -.0422 | -.0808 | | | |
| 90.000 | -.0338 | -.0459 | -.0751 | .0609 | -.0380 | -.0475 | -.0664 | | | |
| 105.000 | | | .0000 | .0622 | -.0786 | -.1228 | -.1321 | | | |
| 110.000 | | | | | | | | -.1599 | | |
| 120.000 | -.0960 | -.0439 | .0950 | .0675 | .0482 | -.0691 | -.1383 | -.1857 | | |
| 135.000 | | | .1220 | .1684 | .0623 | -.0357 | -.0504 | | | |
| 150.000 | -.0695 | -.0771 | .1128 | .1603 | .0761 | -.0119 | -.0308 | | | |
| 165.000 | -.0891 | | .1065 | | .1311 | .0511 | -.1556 | | | |
| 180.000 | -.0655 | -.0597 | .1200 | .1625 | | | | | | |
| 320.000 | -.0017 | .1972 | .3092 | -.0242 | -.1752 | -.1223 | -.1628 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB38)

ALPHAO( 4) = -.055 BETAO ( 5) = 6.287

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0060 | .0230 | .0460 | .0700 | .1120 | .1580 | .1860 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3845 | .807. | .6743 | .4983 | .1284 | .4450 | | -.0180 | | .0098 | -.0083 | -.0744 | -.1907 | -.0832 | -.0733 |
| 20.000 | | | .8128 | .3838 | .1684 | .1735 | | -.0838 | | -.0953 | | | | | |
| 40.000 | | | .4978 | .3387 | .1420 | .1483 | | -.0187 | | -.0991 | .0000 | .0000 | -.1043 | -.0580 | -.0749 |
| 55.000 | | | .3884 | .2879 | .1550 | .1084 | | .0752 | | -.0193 | | | | | |
| 70.000 | | | .3358 | .2686 | .1734 | .0893 | | .1162 | | .0000 | -.1042 | -.1278 | -.1133 | -.1255 | |
| 90.000 | | .4390 | .3215 | .2400 | .1662 | .0964 | | .0855 | | .0000 | -.0673 | -.1309 | -.1518 | -.1104 | |
| 120.000 | | | .3572 | .2548 | .1722 | .1560 | | .3027 | | .0923 | -.1048 | -.1894 | -.1165 | -.1284 | |
| 140.000 | | | | | | | | | | -.0032 | | | | | |
| 150.000 | | | .3959 | .3208 | .2638 | .2189 | | | | -.0208 | -.1900 | -.1171 | -.0921 | -.0708 | |
| 151.000 | | | | | | | | | .5578 | | | | | | |
| 158.000 | | | | | | | | .8784 | | | | | | | |
| 162.000 | | | | | | | | | .8038 | | | | | | |
| 165.000 | | | | | | | | | | -.0980 | -.1686 | -.1046 | -.0853 | -.0621 | |
| 189.000 | | | | | | | | 1.0174 | | | | | | | |
| 174.000 | | | | | | | .8468 | | | | | | | | |
| 180.000 | 1.3845 | .7373 | .4568 | .3887 | .3355 | .3047 | | 1.0263 | | -.0699 | -.1705 | -.1053 | -.0966 | -.0739 | |
| 305.000 | | | .7984 | .7276 | .6515 | .4161 | | .2800 | | .1768 | | | | | |
| 320.000 | | | .7737 | .6939 | .4856 | .2626 | | .2066 | | -.0025 | .0826 | -.0889 | -.0648 | .0285 | -.0317 |
| 340.000 | | | .7433 | .5735 | .2457 | .4328 | | -.0985 | | .0859 | | | | | |

| X/LB | .6520 | .7200 | .7790 | .8210 | .8790 | .9210 | .9800 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.1394 | .1041 | .3447 | .3388 | -.1931 | -.1435 | -.1283 | | -.0825 | -.0958 |
| 40.000 | .0174 | .0788 | .4112 | .1386 | -.1986 | -.1357 | -.1315 | | -.0981 | -.1075 |
| 70.000 | -.0428 | -.0982 | -.0953 | -.0015 | .1693 | -.0521 | -.0844 | | | |
| 90.000 | -.0445 | -.0533 | -.0625 | .0756 | -.0547 | -.0809 | -.0835 | | | |
| 105.000 | | | .0000 | .0513 | -.0891 | -.1330 | -.1377 | | | |
| 110.000 | | | | | | | | -.1704 | | |
| 120.000 | -.1230 | -.0848 | .0710 | .0030 | .0057 | -.0975 | -.1629 | -.1872 | | |
| 135.000 | | | .0822 | .1014 | .0257 | -.0625 | -.0903 | | | |
| 150.000 | -.0982 | -.0947 | .0730 | .1148 | .0381 | -.0868 | -.0779 | | | |
| 165.000 | -.0837 | | .0783 | | .0735 | .0074 | -.1551 | | | |
| 180.000 | -.0726 | -.0750 | .0966 | .0782 | | | | | | |
| 320.000 | -.0399 | .1095 | .3371 | -.0809 | -.1442 | -.0809 | -.1557 | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB38)

ALPHAO( 5) = 1.985 BETAO ( 1) = -6.257

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3795 | .8843 | .8891 | .4445 | .1717 | .4310 | | .0211 | | .0243 | -.0222 | -.0178 | -.0366 | -.0575 | .0147 |
| 20.000 | | | .7458 | .5842 | .2583 | .3810 | | -.0977 | | .0830 | | | | | |
| 40.000 | | | .8274 | .7155 | .5129 | .2312 | | .1977 | | -.0261 | .0000 | .0000 | .0772 | .0682 | -.0247 |
| 55.000 | | | .8229 | .7402 | .6336 | .3601 | | .2904 | | .1694 | | | | | |
| 70.000 | | | .7707 | .8728 | .5883 | .4038 | | .2609 | | .0000 | -.0167 | -.0121 | -.0058 | -.0090 | |
| 90.000 | | .8658 | .7326 | .8054 | .5286 | .4156 | | .2888 | | .0000 | .0300 | .0013 | -.0315 | -.0289 | |
| 120.000 | | | .6677 | .5222 | .4185 | .3935 | | .3057 | | .3614 | .0829 | -.0932 | -.1250 | -.1119 | |
| 140.000 | | | | | | | | | | .3536 | | | | | |
| 150.000 | | | .5541 | .3871 | .3409 | .3179 | | | | .1893 | -.1661 | -.1447 | -.1270 | -.0910 | |
| 151.000 | | | | | | | | | .8827 | | | | | | |
| 156.000 | | | | | | | | .9690 | | | | | | | |
| 162.000 | | | | | | | | | .9677 | | | | | | |
| 165.000 | | | | | | | | | | -.0089 | -.1366 | -.1434 | -.1193 | -.0838 | |
| 169.000 | | | | | | | | 1.0398 | | | | | | | |
| 174.000 | | | | | | | .8268 | | | | | | | | |
| 180.000 | 1.3795 | .7317 | .4196 | .3218 | .2802 | .2653 | | .9357 | | -.0731 | -.1866 | -.1218 | -.1067 | -.0844 | |
| 305.000 | | | .4328 | .2414 | .1513 | .1328 | | .0371 | | -.0374 | | | | | |
| 320.000 | | | .5745 | .3137 | .1679 | .1663 | | -.0592 | | -.1113 | -.0215 | -.1447 | -.1694 | .0104 | -.0106 |
| 340.000 | | | .6740 | .3572 | .1887 | .2338 | | .0166 | | -.0569 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0570 | .2656 | .5194 | .3078 | -.1691 | -.2419 | -.0891 | | -.0330 | -.0677 |
| 40.000 | .0596 | .1879 | .3127 | -.1043 | -.1894 | -.0332 | -.1375 | | -.2103 | -.1406 |
| 70.000 | -.0100 | -.0765 | -.0757 | -.0925 | .3781 | .0036 | -.0330 | | | |
| 90.000 | -.0083 | -.0378 | -.0674 | -.0605 | .0535 | .0052 | -.0471 | | | |
| 105.000 | | | .0000 | .1360 | .0765 | -.0364 | -.0828 | | | |
| 110.000 | | | | | | | | -.1310 | | |
| 120.000 | -.1021 | -.0971 | -.1119 | .1326 | .1142 | -.0019 | -.0494 | -.1140 | | |
| 135.000 | | | .0751 | .1165 | .0850 | -.0239 | -.0665 | | | |
| 150.000 | -.0729 | -.0724 | .1188 | .0499 | -.1116 | -.0471 | .0567 | | | |
| 165.000 | -.0769 | | .1100 | | .2866 | .2409 | -.0763 | | | |
| 180.000 | -.0887 | -.0865 | .0882 | .0289 | | | | | | |
| 320.000 | .0568 | .1830 | .5112 | .3371 | -.0755 | -.1348 | -.1333 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET838)

ALPHA0( 5) = 1.881 BETA0 ( 2) = -2.089

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1880 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3325 | .9759 | .7103 | .4754 | .1705 | .3348 | | -.0063 | | -.0793 | .1433 | -.0708 | -.0977 | -.0261 | .0006 |
| 20.000 | | | .7278 | .4975 | .1863 | .3780 | | -.1014 | | .0047 | | | | | |
| 40.000 | | | .7353 | .5494 | .3569 | .2244 | | .1521 | | -.0799 | .0000 | .0000 | -.0245 | .0179 | -.0603 |
| 55.000 | | | .6985 | .5427 | .4533 | .2956 | | .2389 | | .1108 | | | | | |
| 70.000 | | | .6445 | .4937 | .4238 | .3313 | | .2168 | | .0000 | -.0443 | -.0657 | -.0675 | -.0650 | |
| 90.000 | | .7196 | .6145 | .4594 | .3755 | .3530 | | .2393 | | .0000 | -.0056 | -.0505 | -.0903 | -.0935 | |
| 120.000 | | | .5783 | .4427 | .3348 | .3426 | | .4099 | | .2893 | .0319 | -.1391 | -.1365 | -.1019 | |
| 140.000 | | | | | | | | | | .2667 | | | | | |
| 150.000 | | | .5115 | .3831 | .3277 | .3018 | | | | .1185 | -.1506 | -.1356 | -.1035 | -.0698 | |
| 151.000 | | | | | | | | | .7897 | | | | | | |
| 156.000 | | | | | | | | .8434 | | | | | | | |
| 162.000 | | | | | | | | | .9291 | | | | | | |
| 165.000 | | | | | | | | | | .0180 | -.1587 | -.1099 | -.0817 | -.0672 | |
| 169.000 | | | | | | | | .9892 | | | | | | | |
| 174.000 | | | | | | | .8142 | | | | | | | | |
| 180.000 | 1.3325 | .7327 | .4345 | .3543 | .3147 | .2868 | | 1.0244 | | -.0928 | -.1835 | -.0932 | -.0814 | -.0852 | |
| 305.000 | | | .5611 | .4081 | .2373 | .2056 | | .1034 | | .0225 | | | | | |
| 320.000 | | | .8741 | .4860 | .1566 | .2571 | | .0095 | | -.0308 | .0613 | -.1176 | -.1208 | -.0721 | -.0135 |
| 340.000 | | | .7241 | .4632 | .1780 | .1842 | | .0228 | | -.0268 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0169 | .2390 | .4559 | .2914 | -.1508 | -.2018 | -.1204 | | -.0468 | -.1010 |
| 40.000 | .0612 | .1525 | .2780 | .0242 | -.1327 | -.0730 | -.1488 | | -.1598 | -.0964 |
| 70.000 | -.0541 | -.0995 | -.1043 | -.0504 | .3608 | -.0403 | -.0825 | | | |
| 90.000 | -.0459 | -.0574 | -.0819 | .0597 | -.0078 | -.0494 | -.0769 | | | |
| 105.000 | | | .0000 | .0959 | -.0121 | -.0871 | -.1123 | | | |
| 110.000 | | | | | | | | -.1478 | | |
| 120.000 | -.0574 | -.0385 | .0992 | .1148 | .0929 | -.0318 | -.0910 | -.1430 | | |
| 135.000 | | | .1301 | .1512 | .1060 | -.0218 | -.0468 | | | |
| 150.000 | -.0580 | -.0504 | .1222 | .1585 | .0068 | .0830 | .0474 | | | |
| 165.000 | -.0648 | | .1087 | | .2345 | .1805 | -.0948 | | | |
| 180.000 | -.0711 | -.0838 | .0585 | .2329 | | | | | | |
| 320.000 | .0038 | .2382 | .3624 | .2886 | -.1111 | -.1237 | -.1918 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB36)

ALPHAC( 5) = 1.994 BETAO ( 3) = 2.124

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3844 | .8699 | .6828 | .4297 | .1603 | .4569 | | -.0127 | | -.0709 | .1344 | -.0946 | -.1383 | -.0426 | -.0253 |
| 20.000 | | | .6687 | .4428 | .1755 | .1931 | | -.0062 | | -.0997 | | | | | |
| 40.000 | | | .6287 | .4594 | .2160 | .2492 | | .0291 | | -.0872 | .0000 | .0000 | -.0773 | -.0220 | .0524 |
| 55.000 | | | .5584 | .4194 | .2830 | .1977 | | .1393 | | .0301 | | | | | |
| 70.000 | | | .4992 | .3662 | .2762 | .1743 | | .1746 | | .0000 | -.0901 | -.1043 | -.1068 | -.1232 | |
| 90.000 | | .5609 | .4663 | .3381 | .2587 | .1786 | | .2037 | | .0000 | -.0509 | -.1049 | -.1312 | -.1255 | |
| 120.000 | | | .4525 | .3391 | .2434 | .2236 | | .3620 | | .2348 | -.0250 | -.1826 | -.1425 | -.0985 | |
| 140.000 | | | | | | | | | | .1425 | | | | | |
| 150.000 | | | .4289 | .3339 | .2771 | .2466 | | | | .0333 | -.1539 | -.1168 | -.0860 | -.0747 | |
| 151.000 | | | | | | | | | .6958 | | | | | | |
| 156.000 | | | | | | | | .8994 | | | | | | | |
| 162.000 | | | | | | | | | .8246 | | | | | | |
| 165.000 | | | | | | | | | | -.0081 | -.1697 | -.0898 | -.0657 | -.0685 | |
| 169.000 | | | | | | | | .9956 | | | | | | | |
| 174.000 | | | | | | | .8377 | | | | | | | | |
| 180.000 | 1.3844 | .7173 | .4215 | .3400 | .2975 | .2700 | | 1.0349 | | -.1021 | -.1607 | -.0927 | -.0622 | -.0659 | |
| 305.000 | | | .6396 | .5095 | .5162 | .2975 | | .2053 | | .0910 | | | | | |
| 320.000 | | | .6971 | .5413 | .4165 | .2953 | | .1057 | | -.0955 | .0855 | -.1158 | -.0644 | -.0282 | -.0610 |
| 340.000 | | | .7154 | .4752 | .2006 | .4454 | | -.1343 | | .0179 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0072 | .2035 | .3775 | .2993 | -.1306 | -.1382 | -.1307 | | -.1074 | -.1132 |
| 40.000 | -.0197 | .1189 | .4008 | .1439 | -.2034 | -.1263 | -.1885 | | -.1015 | -.1087 |
| 70.000 | -.0603 | -.0960 | -.0954 | .0048 | .1961 | -.0539 | -.0898 | | | |
| 90.000 | -.0531 | -.0570 | -.0744 | .0436 | -.0411 | -.0562 | -.0699 | | | |
| 105.000 | | | .0000 | .0594 | -.0814 | -.1185 | -.1313 | | | |
| 110.000 | | | | | | | | -.1575 | | |
| 120.000 | -.0715 | -.0382 | .0640 | .1109 | .0875 | -.0496 | -.1215 | -.1715 | | |
| 135.000 | | | .1229 | .1876 | .0888 | -.0085 | -.0474 | | | |
| 150.000 | -.0806 | -.0704 | .1143 | .1826 | .0915 | .0232 | .0115 | | | |
| 165.000 | -.0777 | | .0844 | | .1931 | .0918 | -.1421 | | | |
| 180.000 | -.0774 | -.0684 | .1044 | .2112 | | | | | | |
| 320.000 | -.0079 | .0047 | .3404 | .0550 | -.1759 | -.1310 | -.1581 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB36)

ALPHAO( 5) = 2.005 BETAO ( 4) = 6.266

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2851 | .8918 | .6838 | .4213 | .0704 | .3889 | | -.0586 | | -.0008 | -.0110 | -.0833 | -.1306 | -.0725 | -.0981 |
| 20.000 | | | .6182 | .3248 | .1089 | .2162 | | -.0852 | | -.1057 | | | | | |
| 40.000 | | | .5134 | .2850 | .1170 | .1177 | | -.0213 | | -.1147 | .0000 | .0000 | -.1216 | -.0609 | -.0621 |
| 55.000 | | | .4073 | .2507 | .1205 | .0911 | | .0483 | | -.0364 | | | | | |
| 70.000 | | | .3562 | .2364 | .1387 | .0756 | | .1153 | | .0000 | -.1179 | -.1341 | -.1212 | -.1418 | |
| 90.000 | | .4093 | .3335 | .2355 | .1484 | .0701 | | .0829 | | .0000 | -.0842 | -.1402 | -.1524 | -.1270 | |
| 120.000 | | | .3254 | .2478 | .1631 | .1339 | | .2625 | | .0680 | -.1121 | -.2050 | -.1325 | -.1232 | |
| 140.000 | | | | | | | | | | -.0143 | | | | | |
| 150.000 | | | .3468 | .2834 | .2353 | .1890 | | | | -.0363 | -.2057 | -.1350 | -.0892 | -.0886 | |
| 151.000 | | | | | | | | | .4961 | | | | | | |
| 156.000 | | | | | | | | .6762 | | | | | | | |
| 162.000 | | | | | | | | | .7690 | | | | | | |
| 165.000 | | | | | | | | | | -.1095 | -.1866 | -.1261 | -.1017 | -.0834 | |
| 169.000 | | | | | | | | .8510 | | | | | | | |
| 174.000 | | | | | | | .6417 | | | | | | | | |
| 180.000 | 1.2851 | .6713 | .4045 | .3277 | .2933 | .2658 | | .9118 | | -.0884 | -.1862 | -.1293 | -.1164 | -.0880 | |
| 305.000 | | | .8068 | .7104 | .6218 | .4043 | | .2642 | | .1583 | | | | | |
| 320.000 | | | .7985 | .6703 | .4549 | .2470 | | .1968 | | -.0146 | .0158 | -.1074 | -.0269 | .0290 | -.0303 |
| 340.000 | | | .7575 | .5264 | .1867 | .3831 | | -.0974 | | .0362 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.1509 | .1821 | .3549 | .3526 | -.1795 | -.1294 | -.1284 | | -.0990 | -.0983 |
| 40.000 | .0152 | .0830 | .4624 | .1646 | -.1896 | -.1274 | -.1274 | | -.0921 | -.1049 |
| 70.000 | -.0588 | -.1060 | -.1085 | -.0221 | .2019 | -.0668 | -.1006 | | | |
| 90.000 | -.0578 | -.0686 | -.0625 | .0394 | -.0753 | -.0809 | -.0898 | | | |
| 105.000 | | | .0000 | .0361 | -.1041 | -.1415 | -.1460 | | | |
| 110.000 | | | | | | | | -.1751 | | |
| 120.000 | -.1322 | -.0700 | .0745 | .0263 | .0079 | -.0865 | -.1600 | -.1937 | | |
| 135.000 | | | .0699 | .0905 | .0230 | -.0627 | -.0960 | | | |
| 150.000 | -.1047 | -.1026 | .0657 | .0885 | .0181 | -.0820 | -.0960 | | | |
| 165.000 | -.0965 | | .0683 | | .0403 | -.0212 | -.1558 | | | |
| 180.000 | -.0873 | -.0930 | .0801 | .0331 | | | | | | |
| 320.000 | -.0153 | .2001 | .3496 | -.0566 | -.1398 | -.0604 | -.1604 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB36)

ALPHAO( 6) = 4.105 BETAO ( 1) = -6.249

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3247 | .9610 | .7123 | .4374 | .1075 | .3879 | | .0191 | | .0148 | -.0374 | -.0358 | -.0107 | -.0523 | .0354 |
| 20.000 | | | .7755 | .5823 | .2128 | .3533 | | -.1012 | | .0664 | | | | | |
| 40.000 | | | .8591 | .7169 | .4969 | .2100 | | .1912 | | -.0343 | .0000 | .0000 | .0143 | .0842 | -.0303 |
| 55.000 | | | .8400 | .7393 | .6152 | .3474 | | .2695 | | .1589 | | | | | |
| 70.000 | | | 7774 | .6648 | .5721 | .3792 | | .2295 | | .0000 | -.0387 | -.0290 | -.0116 | -.0104 | |
| 90.000 | | .8413 | .7253 | .5989 | .5071 | .3840 | | .2634 | | .0000 | .0140 | -.0100 | -.0494 | -.0251 | |
| 120.000 | | | .6388 | .4966 | .3879 | .3394 | | .3217 | | .3174 | .0666 | -.1007 | -.1443 | -.1340 | |
| 140.000 | | | | | | | | | | .3252 | | | | | |
| 150.000 | | | .5159 | .3497 | .3047 | .2740 | | | | .1755 | -.1806 | -.1661 | -.1462 | -.1114 | |
| 151.000 | | | | | | | | | .8256 | | | | | | |
| 156.000 | | | | | | | | .8859 | | | | | | | |
| 162.000 | | | | | | | | | .9012 | | | | | | |
| 165.000 | | | | | | | | | | -.0306 | -.1547 | -.1590 | -.1430 | -.1049 | |
| 169.000 | | | | | | | | .9274 | | | | | | | |
| 174.000 | | | | | | | .7318 | | | | | | | | |
| 180.000 | 1.3247 | .8704 | .3782 | .2812 | .2448 | .2287 | | .8607 | | -.0888 | -.1983 | -.1427 | -.1239 | -.0990 | |
| 305.000 | | | .4261 | .2280 | .1304 | .1032 | | .0105 | | -.0507 | | | | | |
| 320.000 | | | .5797 | .3113 | .1314 | .1301 | | -.0585 | | -.1133 | -.0332 | -.1552 | -.1712 | .0308 | .0449 |
| 340.000 | | | .6894 | .3384 | .1647 | .2045 | | .0447 | | -.0597 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0979 | .2267 | .5610 | .3316 | -.1590 | -.2510 | -.0910 | | -.0328 | -.0664 |
| 40.000 | .1194 | .1897 | .3584 | -.0623 | -.1871 | -.1112 | -.1367 | | -.2087 | -.1300 |
| 70.000 | -.0156 | -.0849 | -.0895 | -.1082 | .3611 | -.0242 | -.0541 | | | |
| 90.000 | -.0153 | -.0486 | -.0816 | -.0806 | .0207 | -.0156 | -.0662 | | | |
| 105.000 | | | .0000 | .0830 | .0616 | -.0523 | -.0979 | | | |
| 110.000 | | | | | | | | -.1433 | | |
| 120.000 | -.1689 | -.1603 | -.1357 | .0668 | .0943 | -.0158 | -.0619 | -.1250 | | |
| 135.000 | | | .0584 | .0747 | .0816 | -.0414 | -.0792 | | | |
| 150.000 | -.0970 | -.0951 | .0915 | .0338 | -.1358 | -.0727 | -.0521 | | | |
| 165.000 | -.0967 | | .0919 | | .2409 | .2301 | -.0691 | | | |
| 180.000 | -.0996 | -.0987 | .0725 | .0400 | | | | | | |
| 320.000 | .0668 | .1837 | .5571 | .4340 | -.0523 | -.1351 | -.1410 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET836)

ALPHA0( 6) = 4.105 BETA0 ( 2) = -4.195

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3102 | .9947 | .7190 | .3988 | .1403 | .3196 | | .0257 | | -.0236 | .1044 | -.0747 | -.0470 | -.0711 | -.0010 |
| 20.000 | | | .7580 | .5033 | .1891 | .3021 | | -.1100 | | .0449 | | | | | |
| 40.000 | | | .8075 | .6373 | .4498 | .1817 | | .1850 | | -.0517 | .0000 | .0000 | .0623 | .0209 | -.0004 |
| 55.000 | | | .7872 | .6361 | .5641 | .3060 | | .2589 | | .1226 | | | | | |
| 70.000 | | | .7021 | .5635 | .5151 | .3419 | | .2096 | | .0000 | -.0508 | -.0527 | -.0592 | -.0361 | |
| 90.000 | | .7864 | .6548 | .5116 | .4601 | .3526 | | .2375 | | .0000 | .0012 | -.0416 | -.0810 | -.0589 | |
| 120.000 | | | .5938 | .4464 | .3549 | .3251 | | .3251 | | .3054 | .0420 | -.1268 | -.1541 | -.1342 | |
| 140.000 | | | | | | | | | | .2928 | | | | | |
| 150.000 | | | .4961 | .3410 | .2968 | .2769 | | | | .1419 | -.1772 | -.1650 | -.1397 | -.0952 | |
| 151.000 | | | | | | | | | .8011 | | | | | | |
| 156.000 | | | | | | | | .8569 | | | | | | | |
| 162.000 | | | | | | | | | .8901 | | | | | | |
| 165.000 | | | | | | | | | | -.0107 | -.1630 | -.1618 | -.1214 | -.0916 | |
| 169.000 | | | | | | | | .9399 | | | | | | | |
| 174.000 | | | | | | | .7514 | | | | | | | | |
| 180.000 | 1.3102 | .8807 | .3843 | .2974 | .2584 | .2390 | | .9217 | | -.0951 | -.1875 | -.1268 | -.0990 | -.0916 | |
| 305.000 | | | .4814 | .2909 | .1901 | .1189 | | .0590 | | -.0324 | | | | | |
| 320.000 | | | .6329 | .3574 | .1228 | .2027 | | -.0354 | | -.0524 | .0084 | -.1416 | -.1554 | -.0272 | .0405 |
| 340.000 | | | .7135 | .3497 | .1464 | .1674 | | .0023 | | -.0821 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0934 | .3052 | .5414 | .4897 | -.1148 | -.2187 | -.1202 | | -.0307 | -.0979 |
| 40.000 | .1431 | .1728 | .3601 | .0121 | -.1768 | -.1313 | -.1662 | | -.1898 | -.1321 |
| 70.000 | -.0455 | -.1053 | -.1152 | -.1172 | .2982 | -.0442 | -.0709 | | | |
| 90.000 | -.0435 | -.0651 | -.0968 | -.0424 | .0091 | -.0334 | -.0768 | | | |
| 105.000 | | | .0000 | .0928 | .0369 | -.0685 | -.1097 | | | |
| 110.000 | | | | | | | | -.1528 | | |
| 120.000 | -.1048 | -.1034 | -.0680 | .0942 | .0933 | -.0320 | -.0810 | -.1382 | | |
| 135.000 | | | .0892 | .0890 | .0402 | -.0487 | -.0892 | | | |
| 150.000 | -.0775 | -.0739 | .0944 | .0808 | -.1032 | -.0493 | .0192 | | | |
| 165.000 | -.0782 | | .0918 | | .1695 | .1371 | -.1055 | | | |
| 180.000 | -.0824 | -.0804 | .0954 | .0962 | | | | | | |
| 320.000 | .0078 | .2197 | .5830 | .3558 | -.1009 | -.1303 | -.1718 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB36)

ALPHAO( 6) = 4.105 BETAO ( 3) = .015

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3370 | 1.1201 | .7888 | .3562 | .0987 | .1539 | | -.0088 | | .0892 | .1200 | -.0877 | -.1295 | .0100 | .0116 |
| 20.000 | | | .7840 | .4174 | .0854 | .1397 | | -.0402 | | .0613 | | | | | |
| 40.000 | | | .7619 | .5039 | .1744 | .2226 | | .0995 | | -.1156 | .0000 | .0000 | -.0699 | .0280 | .0355 |
| 55.000 | | | .6242 | .4728 | .3212 | .2304 | | .1799 | | .0655 | | | | | |
| 70.000 | | | .5680 | .4055 | .3105 | .2482 | | .1620 | | .0000 | -.0754 | -.0984 | -.1077 | -.1000 | |
| 90.000 | | .6354 | .5456 | .3866 | .2908 | .2499 | | .1828 | | .0000 | -.0434 | -.0827 | -.1286 | -.1109 | |
| 120.000 | | | .5038 | .3684 | .2639 | .2324 | | .3783 | | .2216 | -.0101 | -.1690 | -.1610 | -.1160 | |
| 140.000 | | | | | | | | | | .2064 | | | | | |
| 150.000 | | | .4431 | .3277 | .2764 | .2337 | | | | .0699 | -.1673 | -.1535 | -.1096 | -.0895 | |
| 151.000 | | | | | | | | | .6721 | | | | | | |
| 155.000 | | | | | | | | .7028 | | | | | | | |
| 162.000 | | | | | | | | | .8345 | | | | | | |
| 165.000 | | | | | | | | | | -.0072 | -.1786 | -.1173 | -.0894 | -.0830 | |
| 169.000 | | | | | | | | .8933 | | | | | | | |
| 174.000 | | | | | | | .6952 | | | | | | | | |
| 180.000 | 1.3370 | .6485 | .3862 | .3196 | .2800 | .2421 | | .9378 | | -.1120 | -.1680 | -.0939 | -.0904 | -.0817 | |
| 305.000 | | | .6156 | .3796 | .2897 | .2965 | | .1533 | | .0527 | | | | | |
| 320.000 | | | .7848 | .3722 | .1267 | .2884 | | .0526 | | -.1107 | .0543 | -.1218 | -.0628 | -.0395 | -.0182 |
| 340.000 | | | .8206 | .3139 | .0726 | .2278 | | -.0915 | | .0555 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1628 | .2632 | .3755 | .3364 | -.1464 | -.1192 | -.1378 | | -.1009 | -.1051 |
| 40.000 | -.0231 | .2102 | .3443 | .1164 | -.1900 | -.1215 | -.1901 | | -.1267 | -.1342 |
| 70.000 | -.0715 | -.1157 | -.1299 | -.0432 | .1290 | -.0608 | -.0832 | | | |
| 90.000 | -.0581 | -.0673 | -.1014 | .0520 | -.0215 | -.0772 | -.1048 | | | |
| 105.000 | | | .0000 | .0822 | -.0399 | -.0998 | -.1283 | | | |
| 110.000 | | | | | | | | -.1672 | | |
| 120.000 | -.0640 | -.0481 | .0868 | .0759 | .0644 | -.0440 | -.1058 | -.1512 | | |
| 135.000 | | | .0895 | .1382 | .0831 | -.0149 | -.0381 | | | |
| 150.000 | -.0778 | -.0606 | .0514 | .1844 | .0605 | .0551 | .0255 | | | |
| 165.000 | -.0859 | | -.0422 | | .2427 | .1123 | -.1293 | | | |
| 180.000 | -.0889 | -.0069 | -.0386 | .2513 | | | | | | |
| 320.000 | .0207 | .2626 | .4384 | .1844 | -.1395 | -.1224 | -.1712 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB36)

ALPHAO( B) = 4.102 BETAO ( 4) = 4.191

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2781 | .9992 | .7417 | .3764 | .1022 | .3010 | | -.0311 | | -.0288 | .0363 | -.1047 | -.1748 | -.0456 | .0543 |
| 20.000 | | | .6976 | .3507 | .1157 | .1324 | | -.0171 | | -.1436 | | | | | |
| 40.000 | | | .5922 | .3777 | .1101 | .1958 | | -.0164 | | -.1286 | .0108 | -.0658 | -.1110 | -.0108 | .0052 |
| 55.000 | | | .4752 | .3188 | .1770 | .1205 | | .0880 | | -.0148 | | | | | |
| 70.000 | | | .4369 | .2926 | .1902 | .0603 | | .1400 | | .0000 | -.1139 | -.1345 | -.1224 | -.1403 | |
| 90.000 | | .4684 | .4123 | .2794 | .1849 | .0998 | | .1546 | | .1023 | -.0766 | -.1332 | -.1530 | -.1285 | |
| 120.000 | | | .3730 | .2857 | .1853 | .1587 | | .2733 | | .1771 | -.0530 | -.2074 | -.1524 | -.1150 | |
| 140.000 | | | | | | | | | | .0367 | | | | | |
| 150.000 | | | .3507 | .2817 | .2340 | .1866 | | | | -.0223 | -.1990 | -.1306 | -.1065 | -.0881 | |
| 151.000 | | | | | | | | | .5499 | | | | | | |
| 156.000 | | | | | | | | .7011 | | | | | | | |
| 162.000 | | | | | | | | | .7663 | | | | | | |
| 165.000 | | | | | | | | | | -.0681 | -.1885 | -.1185 | -.0879 | -.0858 | |
| 169.000 | | | | | | | | .9292 | | | | | | | |
| 174.000 | | | | | | | .8069 | | | | | | | | |
| 180.000 | 1.2781 | .6263 | .3653 | .2985 | .2678 | .2356 | | .9451 | | -.1172 | -.1915 | -.1286 | -.0967 | -.0897 | |
| 305.000 | | | .7580 | .6064 | .4974 | .3520 | | .2148 | | .1084 | | | | | |
| 320.000 | | | .8128 | .6201 | .3393 | .2083 | | .1390 | | -.0511 | .0275 | -.1231 | -.0645 | -.0293 | -.0101 |
| 340.000 | | | .8004 | .4735 | .1153 | .3923 | | -.1407 | | .0370 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0629 | .2361 | .3695 | .3922 | -.1448 | -.1548 | -.1449 | | -.1059 | -.1121 |
| 40.000 | -.0124 | .1445 | .5022 | .1529 | -.1717 | -.1272 | -.1661 | | -.1305 | -.1121 |
| 70.000 | -.0572 | -.1030 | -.1147 | -.0165 | .0000 | -.0720 | -.1074 | | | |
| 90 000 | -.0456 | -.0678 | -.0991 | .0274 | -.0587 | -.0723 | -.0902 | | | |
| 105.000 | | | .0000 | .0467 | -.1072 | -.1405 | -.1519 | | | |
| 110.000 | | | | | | | | -.1797 | | |
| 120.000 | -.0801 | -.0328 | .0557 | .0740 | .0600 | -.0819 | -.1562 | -.1953 | | |
| 135.000 | | | .1256 | .1329 | .0517 | -.0610 | -.0822 | | | |
| 150.000 | -.0901 | -.0781 | .1060 | .0807 | .0178 | -.0348 | -.0514 | | | |
| 165.000 | -.0854 | | .1043 | | .0710 | .0183 | -.1628 | | | |
| 180.000 | -.0771 | -.0698 | .1010 | .1029 | | | | | | |
| 320.000 | .0330 | .2458 | .3540 | .0378 | -.1677 | -.1114 | -.1635 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET836)

ALPHAO( 6) = 4.104 BETAO ( 5) = 6.248

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .49 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2726 | .9895 | .7361 | .3555 | .0703 | .3934 | | -.0695 | | -.0117 | -.0129 | -.0770 | -.0928 | -.0746 | -.0933 |
| 20.000 | | | .6624 | .2756 | .1105 | .1458 | | -.0712 | | -.1163 | | | | | |
| 40.000 | | | .5338 | .2720 | .1175 | .0695 | | -.0332 | | -.1170 | .0077 | -.0579 | -.1259 | -.0486 | -.0506 |
| 55.000 | | | .4136 | .2390 | .1064 | .0783 | | .0250 | | -.0429 | | | | | |
| 70.000 | | | .3709 | .2249 | .1319 | .0714 | | .1010 | | .0000 | -.1273 | -.1365 | -.1350 | -.1460 | |
| 90.000 | | .4045 | .3570 | .2357 | .1437 | .0652 | | .1312 | | .0941 | -.0955 | -.1447 | -.1610 | -.1392 | |
| 120.000 | | | .3247 | .2471 | .1592 | .1265 | | .2500 | | .0949 | -.0541 | -.2191 | -.1512 | -.1311 | |
| 140.000 | | | | | | | | | | -.0172 | | | | | |
| 150.000 | | | .3133 | .2609 | .2146 | .1697 | | | | -.0388 | -.2097 | -.1340 | -.1029 | -.1026 | |
| 151.000 | | | | | | | | | .4592 | | | | | | |
| 156.000 | | | | | | | | .5901 | | | | | | | |
| 162.000 | | | | | | | | | .7203 | | | | | | |
| 165.000 | | | | | | | | | | -.1077 | -.1944 | -.1340 | -.0931 | -.0996 | |
| 169.000 | | | | | | | | .7760 | | | | | | | |
| 174.000 | | | | | | | .5888 | | | | | | | | |
| 180.000 | 1.2726 | .6026 | .3583 | .2900 | .2599 | .2359 | | .8356 | | -.1002 | -.1960 | -.1441 | -.1214 | -.0989 | |
| 305.000 | | | .8224 | .6975 | .6011 | .3976 | | .2312 | | .1397 | | | | | |
| 320.000 | | | .8554 | .6505 | .4371 | .2300 | | .1776 | | -.0342 | -.0505 | -.1175 | -.0331 | .0321 | -.0281 |
| 340.000 | | | .8145 | .4583 | .1324 | .4102 | | -.1065 | | -.0018 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0115 | .2692 | .3937 | .4212 | -.1655 | -.1558 | -.1362 | | -.0900 | -.0943 |
| 40.000 | .0189 | .1298 | .5414 | .2302 | -.1492 | -.1340 | -.1425 | | -.0874 | -.1009 |
| 70.000 | -.0625 | -.1112 | -.1164 | -.0341 | .0000 | -.0829 | -.1180 | | | |
| 90.000 | -.0533 | -.0781 | -.0862 | .0111 | -.0802 | -.0855 | -.0991 | | | |
| 105.000 | | | .0000 | .0187 | -.1293 | -.1592 | -.1610 | | | |
| 110.000 | | | | | | | | -.1812 | | |
| 120.000 | -.0940 | -.0530 | .0745 | .0379 | .0193 | -.0876 | -.1587 | -.1904 | | |
| 135.000 | | | .0868 | .0952 | .0342 | -.0608 | -.0925 | | | |
| 150.000 | -.1049 | -.1011 | .0818 | .0895 | .0255 | -.0737 | -.0925 | | | |
| 165.000 | -.1026 | | .0718 | | .0160 | -.0433 | -.1557 | | | |
| 180.000 | -.0960 | -.0991 | .0732 | .0190 | | | | | | |
| 320.000 | .0547 | .3428 | .3592 | -.0199 | -.1595 | -.1157 | -.1706 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RET836)

ALPHAO( 7) = 6.207 BETAO ( 1) = -4.161

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1880 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2525 | 1.1475 | .7860 | .2850 | -.0364 | .2922 | | .0030 | | -.0385 | .0813 | -.0817 | -.0540 | -.0666 | .0398 |
| 20.000 | | | .8417 | .4108 | .1299 | .2617 | | -.1158 | | .0210 | | | | | |
| 40.000 | | | .9146 | .6141 | .4166 | .1471 | | .1707 | | -.0642 | -.0427 | -.0404 | .0513 | .0451 | -.0043 |
| 55.000 | | | .7828 | .6852 | .5842 | .2886 | | .2230 | | .1051 | | | | | |
| 70.000 | | | .7015 | .5625 | .5173 | .3267 | | .1863 | | .0000 | -.0748 | -.0833 | -.0510 | -.0397 | |
| 90.000 | | .7714 | .6470 | .5176 | .4439 | .3191 | | .2110 | | .1389 | -.0243 | -.0533 | -.0968 | -.0624 | |
| 120.000 | | | .5680 | .4296 | .3296 | .2893 | | .2425 | | .2581 | .0157 | -.1365 | -.1722 | -.1673 | |
| 140.000 | | | | | | | | | | .2624 | | | | | |
| 150.000 | | | .4605 | .3083 | .2646 | .2400 | | | | .1151 | -.1942 | -.1891 | -.1531 | -.1110 | |
| 151.000 | | | | | | | | | .7483 | | | | | | |
| 156.000 | | | | | | | | .8255 | | | | | | | |
| 162.000 | | | | | | | | | .8268 | | | | | | |
| 165.000 | | | | | | | | | | -.0430 | -.1844 | -.1800 | -.1371 | -.1119 | |
| 169.000 | | | | | | | | .8686 | | | | | | | |
| 174.000 | | | | | | | .6878 | | | | | | | | |
| 180.000 | 1.2525 | .8150 | .3429 | .2840 | .2288 | .2082 | | .8426 | | -.1112 | -.2083 | -.1472 | -.1108 | -.1103 | |
| 305.000 | | | .5239 | .2880 | .1412 | .1648 | | .0372 | | -.0364 | | | | | |
| 320.000 | | | .6976 | .2821 | .0578 | .2069 | | -.0460 | | -.0531 | .0052 | -.1563 | -.1508 | -.0010 | .0882 |
| 340.000 | | | .7797 | .2253 | -.0371 | .1950 | | -.0499 | | -.0407 | | | | | |

| X/LB | .8520 | .7280 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1203 | .3728 | .5556 | .4889 | -.1388 | -.1757 | -.1096 | | -.0160 | -.1040 |
| 40.000 | .1243 | .2230 | .3805 | .0402 | -.1704 | -.1787 | -.1729 | | -.1885 | -.1136 |
| 70.000 | -.0470 | -.1083 | -.1194 | -.1293 | .0000 | -.0494 | -.0808 | | | |
| 90.000 | -.0420 | -.0709 | -.1071 | -.1028 | .0015 | -.0417 | -.0907 | | | |
| 105.000 | | | .0000 | .0794 | .0368 | -.0796 | -.1166 | | | |
| 110.000 | | | | | | | | -.1530 | | |
| 120.000 | -.1843 | -.1606 | -.0383 | .0584 | .0840 | -.0308 | -.0801 | -.1365 | | |
| 135.000 | | | .0711 | .0657 | .0634 | -.0612 | -.0980 | | | |
| 150.000 | -.0824 | -.0398 | .0635 | .0444 | -.1468 | -.1076 | -.1013 | | | |
| 165.000 | -.0817 | | .0561 | | .1641 | .1349 | -.1126 | | | |
| 180.000 | -.0837 | -.0034 | .0589 | .0600 | | | | | | |
| 320.000 | .0355 | .3204 | .6406 | .5858 | -.0706 | -.1235 | -.1613 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RET836)

ALPHA0( 7) = 8.210 BETA0 ( 2) = -2.085

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0480 | .0700 | .1120 | .1500 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2248 | 1.3780 | .8183 | .2392 | .0662 | .2074 | | -.0031 | | .0753 | .1028 | -.0977 | -.0855 | .0041 | .0168 |
| 20.000 | | | .8410 | .3162 | .0517 | .2415 | | -.1403 | | .0039 | | | | | |
| 40.000 | | | .8740 | .4795 | .2543 | .1379 | | .1578 | | -.0796 | -.0781 | -.0839 | .0005 | .0009 | .0807 |
| 55.000 | | | .7986 | .5337 | .4730 | .2624 | | .1799 | | .0724 | | | | | |
| 70.000 | | | .6158 | .4824 | .4376 | .2900 | | .1594 | | .0200 | -.1006 | -.1026 | -.1001 | -.0602 | |
| 90.000 | | .7067 | .5977 | .4334 | .3471 | .2890 | | .1870 | | .1240 | -.0398 | -.0716 | -.1203 | -.0813 | |
| 120.000 | | | .5330 | .3880 | .2762 | .2719 | | .2978 | | .2204 | -.0012 | -.1476 | -.1804 | -.1459 | |
| 140.000 | | | | | | | | | | .2210 | | | | | |
| 150.000 | | | .4386 | .3038 | .2546 | .2382 | | | | .0813 | -.1887 | -.1791 | -.1433 | -.1111 | |
| 151.000 | | | | | | | | | .6710 | | | | | | |
| 156.000 | | | | | | | | .7303 | | | | | | | |
| 162.000 | | | | | | | | | .7919 | | | | | | |
| 165.000 | | | | | | | | | | -.0342 | -.1873 | -.1586 | -.1219 | -.1064 | |
| 169.000 | | | | | | | | .8376 | | | | | | | |
| 174.000 | | | | | | | .8844 | | | | | | | | |
| 180.000 | 1.2248 | .8018 | .3467 | .2782 | .2421 | .2142 | | .8525 | | -.1268 | -.1936 | -.1294 | -.1066 | -.1001 | |
| 305.000 | | | .8223 | .2831 | .1444 | .2431 | | .0659 | | .0096 | | | | | |
| 320.000 | | | .7774 | .2648 | .0306 | .2739 | | .0214 | | -.1059 | .0466 | -.1450 | -.1164 | .0002 | .0711 |
| 340.000 | | | .8448 | .2005 | .0680 | .1244 | | .0013 | | .0643 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9800 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0724 | .3257 | .5240 | .3344 | -.1493 | -.2317 | -.1107 | | -.0510 | -.0731 |
| 40.000 | .1304 | .2387 | .3231 | .0644 | -.1489 | -.1666 | -.1930 | | -.1718 | -.1432 |
| 70.000 | -.0857 | -.1213 | -.1305 | -.1329 | .0000 | -.0543 | -.0810 | | | |
| 90.000 | -.0394 | -.0788 | -.1050 | -.0439 | -.0048 | -.0443 | -.0872 | | | |
| 105.000 | | | .0000 | .0863 | .0138 | -.0842 | -.1206 | | | |
| 110.000 | | | | | | | | -.1638 | | |
| 120.0 | -.1111 | -.1016 | .0392 | .0799 | .0936 | -.0406 | -.0958 | -.1504 | | |
| 135.000 | | | .0538 | .0823 | .0534 | -.0581 | -.0998 | | | |
| 150.000 | -.0813 | .0119 | .0551 | .0703 | -.1048 | -.0287 | -.0155 | | | |
| 165.000 | -.0819 | | .0667 | | .1198 | .1049 | -.1110 | | | |
| 180.000 | -.0892 | -.0671 | .0681 | .1145 | | | | | | |
| 320.000 | .0532 | .3334 | .5408 | .3865 | -.1074 | -.1339 | -.1980 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB36)

ALPHA0( 7) = 6.220 BETA0 ( 3) = .020

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3424 | 1.2538 | .8142 | .2416 | .0140 | .2447 | | .0103 | | .0781 | .0956 | -.1012 | -.1376 | .0705 | .1609 |
| 20.000 | | | .8326 | .2956 | -.0148 | .1877 | | -.0826 | | .0602 | | | | | |
| 40.000 | | | .8326 | .4372 | .1748 | .1644 | | .0813 | | -.1287 | -.0358 | -.1081 | -.0655 | .0354 | .1434 |
| 55.000 | | | .7194 | .4541 | .3192 | .2027 | | .1592 | | .0404 | | | | | |
| 70.000 | | | .5537 | .3931 | .3195 | .2257 | | .1306 | | .0000 | -.1038 | -.1135 | -.1266 | -.0886 | |
| 90.000 | | .6233 | .5473 | .3759 | .2845 | .2316 | | .1644 | | .1043 | -.0528 | -.0980 | -.1431 | -.1097 | |
| 120.000 | | | .4897 | .3461 | .2392 | .2188 | | .3176 | | .1946 | -.0283 | -.1733 | -.1824 | -.1357 | |
| 140.000 | | | | | | | | | | .1845 | | | | | |
| 150.000 | | | .4111 | .2894 | .2339 | .2146 | | | | .0537 | -.1849 | -.1753 | -.1259 | -.1118 | |
| 131.000 | | | | | | | | | .6233 | | | | | | |
| 156.000 | | | | | | | | .6783 | | | | | | | |
| 162.000 | | | | | | | | | .7812 | | | | | | |
| 165.000 | | | | | | | | | | -.0276 | -.1904 | -.1376 | -.1116 | -.1036 | |
| 169.000 | | | | | | | | .8253 | | | | | | | |
| 174.000 | | | | | | | .6424 | | | | | | | | |
| 180.000 | 1.3424 | .5887 | .3425 | .2809 | .2375 | .2159 | | .8516 | | -.1221 | -.1816 | -.1107 | -.1045 | -.0999 | |
| 305.000 | | | .6369 | .3636 | .2824 | .2579 | | .1283 | | .0322 | | | | | |
| 320.000 | | | .8197 | .3328 | .1438 | .2516 | | .0527 | | -.1290 | .0199 | -.1389 | -.0759 | -.0142 | .0434 |
| 340.000 | | | .8443 | .2357 | -.0130 | .3074 | | -.1304 | | .0521 | | | | | |

| X/LB | .8520 | .7280 | .7790 | .8210 | .8790 | .9210 | .9800 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1705 | .3109 | .4057 | .3629 | -.1538 | -.1080 | -.1865 | | -.0365 | -.1010 |
| 40.000 | .0520 | .2858 | .3957 | .1626 | -.1876 | -.1364 | -.1877 | | -.1159 | -.1222 |
| 70.000 | -.0748 | -.1181 | -.1265 | -.1235 | .0000 | -.0668 | -.0901 | | | |
| 90.000 | -.0582 | -.0875 | -.0986 | .0270 | -.0114 | -.0612 | -.1027 | | | |
| 105.000 | | | .0090 | .0955 | -.0091 | -.1023 | -.1394 | | | |
| 110.000 | | | | | | | | -.1785 | | |
| 120.000 | -.0784 | -.0534 | .0609 | .0994 | .0377 | -.0746 | -.1063 | -.1450 | | |
| 135.000 | | | .0698 | .1044 | .0188 | -.0196 | -.0358 | | | |
| 150.000 | -.0778 | -.0427 | .0772 | .1134 | .0875 | .0465 | .0078 | | | |
| 165.000 | -.0824 | | .0736 | | .2206 | .1048 | -.1169 | | | |
| 180.000 | -.0950 | -.0587 | .0563 | .2491 | | | | | | |
| 320.000 | .0242 | .3712 | .5095 | .2913 | -.1186 | -.1377 | -.1844 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB36)

ALPHA0( 7) = 8.219 BETA0 ( 4) = 2.132

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | 0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2812 | 1.1652 | .7769 | .2272 | -.0295 | .3788 | | -.0867 | | -.0696 | .0852 | -.0918 | -.1673 | .0689 | .0923 |
| 20.000 | | | .7795 | .2118 | -.0187 | .2376 | | -.0690 | | -.1406 | | | | | |
| 40.000 | | | .7453 | .3120 | .0939 | .2851 | | -.0025 | | -.1698 | -.0396 | -.1052 | -.0690 | .0020 | .0649 |
| 55.000 | | | .5928 | .3578 | .2154 | .1796 | | .1130 | | .0024 | | | | | |
| 70.000 | | | .4985 | .3146 | .2154 | .1[illegible].4 | | .1464 | | .0000 | -.1176 | -.1412 | -.1417 | -.1196 | |
| 90.000 | | .5650 | .4720 | .3067 | .2049 | .1430 | | .1486 | | .0942 | -.0715 | -.1144 | -.1647 | -.1271 | |
| 120.000 | | | .4216 | .2900 | .1973 | .1777 | | .3338 | | .1526 | -.0435 | -.1920 | -.1796 | -.1375 | |
| 140.000 | | | | | | | | | | .1084 | | | | | |
| 150.000 | | | .3544 | .2635 | .2196 | .1809 | | | | .0199 | -.1823 | -.1589 | -.1245 | -.1051 | |
| 151.000 | | | | | | | | | .6042 | | | | | | |
| 156.000 | | | | | | | | .7728 | | | | | | | |
| 162.000 | | | | | | | | | .7006 | | | | | | |
| 165.000 | | | | | | | | | | -.0[illegible]99 | -.1918 | -.1297 | -.1076 | -.1012 | |
| 169.000 | | | | | | | | .7980 | | | | | | | |
| 174.000 | | | | | | | .6735 | | | | | | | | |
| 180.000 | 1.2812 | .5780 | .3231 | .2619 | .2334 | .2088 | | .8727 | | -.1314 | -.1895 | -.1245 | -.1070 | -.1008 | |
| 305.000 | | | .6542 | .5630 | .4400 | .3002 | | .1697 | | .0500 | | | | | |
| 320.000 | | | .8162 | .5721 | .2818 | .2874 | | .0608 | | -.1043 | -.0255 | -.1504 | -.0739 | -.0310 | .0338 |
| 340.000 | | | .9126 | .3354 | .0850 | .2773 | | -.1666 | | -.0075 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1336 | .3152 | .4730 | .3671 | -.1157 | -.1051 | -.1299 | | -.0940 | -.0986 |
| 40.000 | .0152 | .2424 | .4835 | .2120 | -.1814 | -.1492 | -.1886 | | -.1234 | -.1118 |
| 70.000 | -.0635 | -.1144 | -.1312 | -.0267 | .0000 | -.0759 | -.0955 | | | |
| 90.000 | -.0496 | -.0651 | -.0967 | .0360 | -.0414 | -.0855 | -.1101 | | | |
| 105.000 | | | .0000 | .0913 | -.0500 | -.1091 | -.1378 | | | |
| 110.000 | | | | | | | | -.1754 | | |
| 120.000 | -.0525 | -.0383 | .0854 | .0405 | .0306 | -.0609 | -.1239 | -.1645 | | |
| 135.000 | | | .0854 | .1460 | .0511 | -.0272 | -.0543 | | | |
| 150.000 | -.0760 | -.0513 | .0910 | .1901 | .0578 | .0098 | -.0137 | | | |
| 165.000 | -.0892 | | .0668 | | .2273 | .0826 | -.1490 | | | |
| 180.000 | -.0952 | -.0533 | .0615 | .1251 | | | | | | |
| 320.000 | .0450 | .3317 | .4125 | .1636 | -.1522 | -.1523 | -.1873 | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET836)

ALPHAO( 7) = 6.217 BETAO ( 5) = 4.196

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2143 | 1.1530 | .7883 | .3163 | .0731 | .2071 | | -.0490 | | -.0405 | .0367 | -.0948 | -.1326 | -.0225 | .1023 |
| 20.000 | | | .7421 | .2918 | .0882 | .0588 | | -.0321 | | -.1320 | | | | | |
| 40.000 | | | .6556 | .3474 | .0780 | .1238 | | -.0156 | | -.1301 | .0018 | -.0710 | -.1222 | -.0173 | .0152 |
| 55.000 | | | .4931 | .3189 | .1313 | .0777 | | .0640 | | -.0178 | | | | | |
| 70.000 | | | .4292 | .2672 | .1552 | .0640 | | .1206 | | .0000 | -.1336 | -.1486 | -.1268 | -.1488 | |
| 90.000 | | .4740 | .4170 | .2731 | .1659 | .0928 | | .1413 | | .0866 | -.0857 | -.1361 | -.1624 | -.1510 | |
| 120.000 | | | .3712 | .2640 | .1666 | .1346 | | .2348 | | .1482 | -.0694 | -.2126 | -.1669 | -.1180 | |
| 140.000 | | | | | | | | | | .0168 | | | | | |
| 150.000 | | | .3225 | .2552 | .2042 | .1591 | | | | -.0263 | -.2044 | -.1494 | -.1232 | -.1003 | |
| 151.000 | | | | | | | | | .5067 | | | | | | |
| 156.000 | | | | | | | | .7162 | | | | | | | |
| 162.000 | | | | | | | | | .6571 | | | | | | |
| 165.000 | | | | | | | | | | -.0752 | -.2031 | -.1284 | -.1099 | -.0990 | |
| 169.000 | | | | | | | | .7633 | | | | | | | |
| 174.000 | | | | | | | .5964 | | | | | | | | |
| 180.000 | 1.2143 | .5563 | .3218 | .2676 | .2352 | .1996 | | .7917 | | -.1216 | -.2025 | -.1446 | -.1167 | -.1052 | |
| 305.000 | | | .7827 | .6039 | .4933 | .3464 | | .1875 | | .0934 | | | | | |
| 320.000 | | | .8935 | .5803 | .2565 | .1686 | | .1413 | | -.0661 | -.0553 | -.1183 | -.0798 | -.0105 | -.0168 |
| 340.000 | | | .8595 | .3936 | .0251 | .3402 | | -.1408 | | .0031 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1865 | .2631 | .3939 | .4289 | -.1565 | -.1605 | -.1438 | | -.0884 | -.0944 |
| 40.000 | .0281 | .2004 | .5608 | .3063 | -.1397 | -.1307 | -.1749 | | -.0868 | -.1026 |
| 70.000 | -.0617 | -.1119 | -.1288 | -.0328 | .0000 | -.0801 | -.1122 | | | |
| 90.000 | -.0478 | -.0660 | -.0927 | .0222 | -.0595 | -.0850 | -.1049 | | | |
| 105.000 | | | .0000 | .0380 | -.0940 | -.1314 | -.1518 | | | |
| 110.000 | | | | | | | | -.1851 | | |
| 120.000 | -.0584 | -.0302 | .0367 | .0626 | .0345 | -.0917 | -.1627 | -.1934 | | |
| 135.000 | | | .0943 | .1148 | .0451 | -.0696 | -.0980 | | | |
| 150.000 | -.0963 | -.0606 | .0824 | .0437 | .0037 | -.0445 | -.0564 | | | |
| 165.000 | -.0953 | | .0731 | | .0712 | .0235 | -.1620 | | | |
| 180.000 | -.0904 | -.0014 | .0708 | .0861 | | | | | | |
| 320.000 | .1377 | .2857 | .3512 | .0616 | -.1512 | -.1976 | -.2125 | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET837) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2390.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.200 RN/FT = 2.500
ELV-IB = 8.000 ELV-OB = -4.000
RUDDER = .000 SPDBRK = .000

ALPHAO( 1) = -6.357 BETAO ( 1) = -4.340

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.6748 | .8592 | .2430 | .2364 | .5251 | .5551 | | .0522 | | .1163 | .1212 | .0568 | .0719 | -.0150 | .0476 |
| 20.000 | | | .3263 | .2729 | .6641 | .5521 | | -.0265 | | .1497 | | | | | |
| 40.000 | | | .5353 | .2600 | .6975 | .3549 | | .3032 | | .0327 | .1401 | .0075 | .0692 | .1651 | .0073 |
| 55.000 | | | .6580 | .3609 | .4199 | .5073 | | .4312 | | .2727 | | | | | |
| 70.000 | | | .7294 | .4506 | .3498 | .5728 | | .3991 | | .3222 | .0841 | .0783 | .0625 | .0151 | |
| 90.000 | | .9679 | .7811 | .5268 | .3808 | .3991 | | .4515 | | .2430 | .1357 | .0715 | .0264 | .0191 | |
| 120.000 | | | .8175 | .6310 | .4783 | .4292 | | .5960 | | .4820 | .1741 | -.0391 | -.0023 | .0224 | |
| 140.000 | | | | | | | | | | .4343 | | | | | |
| 150.000 | | | .7669 | .5906 | .5200 | .4683 | | | | .2416 | -.0289 | -.0070 | .0080 | .0230 | |
| 151.000 | | | | | | | | | 1.0483 | | | | | | |
| 155.000 | | | | | | | | 1.1397 | | | | | | | |
| 162.000 | | | | | | | | | 1.2094 | | | | | | |
| 165.000 | | | | | | | | | | .1556 | -.0495 | -.0110 | .0080 | .0175 | |
| 169.000 | | | | | | | | 1.3475 | | | | | | | |
| 174.000 | | | | | | | 1.1027 | | | | | | | | |
| 180.000 | 1.6748 | 1.0276 | .6570 | .5431 | .4953 | .4536 | | 1.3209 | | .0129 | -.0788 | .0077 | .0137 | .0032 | |
| 305.000 | | | .3791 | .1456 | .1792 | .1822 | | .1724 | | .0901 | | | | | |
| 320.000 | | | .2907 | .2013 | .4646 | .3508 | | .0323 | | .0395 | .1195 | -.0274 | -.0468 | -.0466 | -.0292 |
| 340.000 | | | .2681 | .2121 | .5160 | .4476 | | .0420 | | .0028 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0851 | .1939 | .4260 | .2993 | -.1559 | -.2291 | -.2053 | | -.1038 | -.0997 |
| 40.000 | -.0872 | .0636 | .1936 | -.0577 | -.1993 | -.1583 | -.1602 | | -.2281 | -.1838 |
| 70.000 | .0581 | .0015 | -.0012 | .0734 | .0000 | .0783 | .0478 | | | |
| 90.000 | .0667 | .0489 | .0156 | .1751 | .1149 | .0755 | .0433 | | | |
| 105.000 | | | .0000 | .2374 | .1019 | .0161 | -.0150 | | | |
| 110.000 | | | | | | | | -.0600 | | |
| 120.000 | .0213 | .0601 | .0655 | .2697 | .2472 | .0873 | .0048 | -.0719 | | |
| 135.000 | | | .2124 | .3012 | .2376 | .0870 | .0426 | | | |
| 150.000 | .0124 | .0193 | .2247 | .2769 | .0817 | .2175 | .2169 | | | |
| 155.000 | .0111 | | .1621 | | .4669 | .3840 | -.0135 | | | |
| 180.000 | .0128 | .0097 | .0676 | .2543 | | | | | | |
| 320.000 | .0810 | .0371 | .3815 | .1371 | -.0691 | -.1718 | -.2029 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB37)

ALPHAO( 1) = -6.348 BETAO ( 2) = -2.232

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1860 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.8810 | .9588 | .2429 | .2831 | .3838 | .5107 | | .0280 | | .0395 | .2470 | .0051 | .0392 | -.0841 | .0067 |
| 20.000 | | | .3105 | .3051 | .4298 | .4924 | | .0010 | | .0893 | | | | | |
| 40.000 | | | .4025 | .2848 | .5792 | .3168 | | .2522 | | .0013 | .1097 | -.0188 | .0529 | .1205 | -.0159 |
| 55.000 | | | .6018 | .3102 | .3538 | .4031 | | .3868 | | .2405 | | | | | |
| 70.000 | | | .6618 | .3927 | .2848 | .3183 | | .3520 | | .3041 | .0708 | .0493 | .0396 | -.0063 | |
| 90.000 | | .9001 | .7098 | .4677 | .3288 | .2940 | | .4001 | | .3101 | .1151 | .0489 | -.0003 | -.0009 | |
| 120.000 | | | .7548 | .5825 | .4366 | .3714 | | .5090 | | .4203 | .1357 | -.0631 | -.0079 | .0168 | |
| 140.000 | | | | | | | | | | .2976 | | | | | |
| 150.000 | | | .7278 | .5742 | .5044 | .4338 | | | | .1967 | -.0563 | -.0146 | .0101 | .0244 | |
| 151.000 | | | | | | | | | .9826 | | | | | | |
| 158.000 | | | | | | | | 1.0858 | | | | | | | |
| 162.000 | | | | | | | | | 1.1889 | | | | | | |
| 165.000 | | | | | | | | | | .1427 | -.0768 | .0018 | .0145 | .0227 | |
| 169.000 | | | | | | | | 1.3622 | | | | | | | |
| 174.000 | | | | | | | 1.1069 | | | | | | | | |
| 180.000 | 1.6610 | 1.0331 | .8585 | .5551 | .5027 | .4449 | | 1.3425 | | .0085 | -.0667 | -.0168 | .0225 | .0220 | |
| 305.000 | | | .4295 | .1688 | .2277 | .2142 | | .2512 | | .1668 | | | | | |
| 320.000 | | | .3247 | .2230 | .4940 | .3508 | | .1214 | | .0051 | .1522 | -.0008 | -.0377 | -.0176 | -.0169 |
| 340.000 | | | .2804 | .2402 | .4165 | .3764 | | .0368 | | .0726 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9800 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0974 | .1503 | .4667 | .3319 | -.1554 | -.2287 | -.1524 | | -.0750 | -.1012 |
| 40.000 | -.0527 | .0261 | .3189 | -.0727 | -.2126 | -.1585 | -.1449 | | -.1448 | -.1417 |
| 70.000 | .0514 | -.0013 | -.0121 | .0906 | .0000 | .0564 | .0246 | | | |
| 90.000 | .0566 | .0435 | .0040 | .1707 | .0859 | .0465 | .0195 | | | |
| 105.000 | | | .0000 | .2118 | .0670 | -.0134 | -.0375 | | | |
| 110.000 | | | | | | | | -.0740 | | |
| 120.000 | .0159 | .0635 | .0913 | .2556 | .2173 | .0556 | -.0143 | -.0838 | | |
| 135.000 | | | .1751 | .3183 | .1991 | .0812 | .0703 | | | |
| 150.000 | .0278 | .0283 | .1344 | .3015 | .1064 | .2060 | .1900 | | | |
| 165.000 | .0285 | | .0451 | | -.4318 | .3134 | -.0378 | | | |
| 180.000 | .0251 | .0228 | .0208 | .3367 | | | | | | |
| 320.000 | .0595 | .1611 | .3429 | .0842 | -.0894 | -.1408 | -.1705 | | | |

ARC97-013 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB37)

ALPHAO( 1) = -8.330 BETAO ( 3) = -.129

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .4870 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.6261 | .8566 | .2538 | .2068 | .6170 | .5109 | | .0674 | | .0178 | .2559 | -.0128 | -.0013 | .0080 | .0775 |
| 20.000 | | | .2996 | .2060 | .5653 | .5039 | | .0843 | | .0543 | | | | | |
| 40.000 | | | .4348 | .1820 | .2450 | .3648 | | .2083 | | -.0240 | .0898 | .0168 | .0300 | .0784 | .0329 |
| 55.000 | | | .5327 | .2568 | .2332 | .3274 | | .3539 | | .2106 | | | | | |
| 70.000 | | | .5835 | .3332 | .2184 | .2131 | | .3873 | | .2856 | .0565 | .0235 | .0240 | -.0120 | |
| 90.000 | | .8148 | .6309 | .4026 | .2668 | .2003 | | .3143 | | .3283 | .0992 | .0290 | -.0173 | -.0037 | |
| 120.000 | | | .6867 | .5179 | .3851 | .3345 | | .4269 | | .2741 | .0592 | -.0797 | -.0090 | .0130 | |
| 140.000 | | | | | | | | | | .2152 | | | | | |
| 150.000 | | | .6906 | .5476 | .4743 | .4183 | | | | .1655 | -.0747 | -.0390 | .0094 | .0401 | |
| 151.000 | | | | | | | | | .9476 | | | | | | |
| 156.000 | | | | | | | | 1.0979 | | | | | | | |
| 162.000 | | | | | | | | | 1.1561 | | | | | | |
| 165.000 | | | | | | | | | | .1325 | -.0807 | -.0067 | .0210 | .0469 | |
| 169.000 | | | | | | | | 1.3762 | | | | | | | |
| 174.000 | | | | | | | 1.1150 | | | | | | | | |
| 180.000 | 1.6291 | 1.0122 | .6508 | .5456 | .4916 | .4549 | | 1.3972 | | .0040 | -.0649 | -.0203 | .0170 | .0492 | |
| 305.000 | | | .4912 | .2016 | .2552 | .2920 | | .2973 | | .1702 | | | | | |
| 320.000 | | | .3686 | .1908 | .4299 | .3173 | | .1640 | | -.0104 | .1927 | .0114 | -.0210 | .0254 | .0010 |
| 340.000 | | | .3053 | .2002 | .5560 | .4949 | | .0676 | | .0763 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0401 | .1098 | .4257 | .4114 | -.1375 | -.2237 | -.1481 | | -.0902 | -.1031 |
| 40.000 | -.0344 | .0948 | .3119 | -.0523 | -.2060 | -.1347 | -.1593 | | -.1187 | -.1099 |
| 70.000 | .0435 | -.0082 | -.0199 | .0909 | .0000 | .0415 | .0082 | | | |
| 90.000 | .0479 | .0363 | -.0039 | .1465 | .0575 | .0327 | .0140 | | | |
| 105.000 | | | .0000 | .1751 | .0187 | -.0314 | -.0513 | | | |
| 110.000 | | | | | | | | -.0883 | | |
| 120.000 | .0105 | .0476 | .0800 | .2130 | .1793 | .0367 | -.0370 | -.1009 | | |
| 135.000 | | | .1035 | .3020 | .1851 | .0778 | .0513 | | | |
| 150.000 | .0339 | .0281 | .0431 | .3003 | .2031 | .1777 | .1502 | | | |
| 165.000 | .0390 | | .0271 | | .3906 | .2708 | -.0744 | | | |
| 180.000 | .0360 | .0322 | .0281 | .3899 | | | | | | |
| 320.000 | .0237 | .1720 | .3177 | .1199 | -.1272 | -.1345 | -.1855 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET837)

ALPHAO( °) = -6.316 BETAO ( °) = 1.982

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5972 | .8726 | .7486 | .2545 | .4507 | .4410 | | .0397 | | .0616 | .2160 | .0307 | -.0343 | .0346 | .0238 |
| 20.000 | | | .4807 | .2242 | .4891 | .3712 | | .0656 | | .0255 | | | | | |
| 40.000 | | | .3857 | .2164 | .4313 | .1660 | | .1845 | | -.0486 | .0415 | .0512 | .0192 | .0536 | -.0076 |
| 55.000 | | | .4578 | .2950 | .2377 | .2338 | | .3127 | | .1745 | | | | | |
| 70.000 | | | .5051 | .2724 | .1803 | .1788 | | .3261 | | .2456 | .0391 | -.0033 | .0025 | -.0252 | |
| 90.000 | | .7188 | .5550 | .3412 | .2205 | .1565 | | .1882 | | .3174 | .0745 | .0069 | -.0443 | -.0149 | |
| 120.000 | | | .6236 | .4727 | .3476 | .2915 | | .4082 | | .2281 | .0145 | -.0971 | -.0149 | -.0069 | |
| 140.000 | | | | | | | | | | .1533 | | | | | |
| 150.000 | | | .6486 | .5268 | .4603 | .3945 | | | | .1499 | -.0933 | -.0376 | -.0169 | .0361 | |
| 151.000 | | | | | | | | | .8737 | | | | | | |
| 158.000 | | | | | | | | 1.2003 | | | | | | | |
| 162.000 | | | | | | | | | 1.0900 | | | | | | |
| 165.000 | | | | | | | | | | .1075 | -.0828 | -.0216 | .0145 | .0453 | |
| 169.000 | | | | | | | | 1.2679 | | | | | | | |
| 174.000 | | | | | | | 1.0370 | | | | | | | | |
| 180.000 | 1.5972 | .9978 | .6439 | .5458 | .4950 | .4463 | | 1.3582 | | .0021 | -.0633 | -.0149 | .0302 | .0405 | |
| 305.000 | | | .5404 | .2576 | .4253 | .2787 | | .3321 | | .2038 | | | | | |
| 320.000 | | | .3898 | .2788 | .5501 | .1798 | | .1962 | | .0014 | .1927 | .0025 | -.0085 | .0528 | -.0106 |
| 340.000 | | | .3095 | .3338 | .4843 | .3654 | | .0345 | | .1024 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0318 | .1568 | .3844 | .3759 | -.1212 | -.1752 | -.1373 | | -.0966 | -.0983 |
| 40.000 | -.0031 | .0541 | .3571 | -.0110 | -.2021 | -.1479 | -.1805 | | -.1177 | -.1099 |
| 70.000 | .0340 | -.0215 | -.0346 | .0701 | .0000 | .0287 | -.0093 | | | |
| 90.000 | .0344 | .0275 | -.0103 | .1426 | .0331 | .0191 | .0009 | | | |
| 105.000 | | | .0000 | .1180 | .0048 | -.0512 | -.0668 | | | |
| 110.000 | | | | | | | | -.0988 | | |
| 120.000 | -.0120 | .0147 | .0807 | .1578 | .1359 | .0145 | -.0600 | -.1261 | | |
| 135.000 | | | .0694 | .2735 | .1478 | .0577 | .0264 | | | |
| 150.000 | .0200 | .0119 | .0150 | .2899 | .1769 | .1238 | .1027 | | | |
| 165.000 | .0252 | | .0113 | | .3391 | .2119 | -.1063 | | | |
| 180.000 | .0320 | .0215 | .0157 | .3613 | | | | | | |
| 320.000 | .0122 | .1419 | .4104 | -.0994 | -.1451 | -.1462 | -.1785 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB37)

ALPHAO( 1) = -6.303 BETAO ( 5) = 4.052

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.8598 | .8481 | .2467 | .2295 | .5132 | .5321 | | .0155 | | .1015 | .1743 | .0454 | -.0735 | .0244 | -.0353 |
| 20.000 | | | .2571 | .2103 | .4537 | .3982 | | .0253 | | -.0051 | | | | | |
| 40.000 | | | .3398 | .2109 | .4006 | .3043 | | .1065 | | .0006 | .0521 | .0437 | .0050 | .0425 | .0332 |
| 55.000 | | | .4022 | .1657 | .1968 | .1777 | | .2686 | | .1319 | | | | | |
| 70.000 | | | .4465 | .2231 | .1428 | .1375 | | .1977 | | .2251 | .0174 | -.0280 | -.0157 | -.0337 | |
| 90.000 | | .6541 | .4937 | .2933 | .1731 | .1213 | | .1359 | | .2856 | .0548 | -.0200 | -.0614 | -.0193 | |
| 120.000 | | | .5663 | .4266 | .3057 | .2574 | | .3515 | | .2127 | -.0206 | -.1449 | -.0394 | -.0267 | |
| 140.000 | | | | | | | | | | .1433 | | | | | |
| 150.000 | | | .6109 | .5098 | .4420 | .3725 | | | | .1087 | -.0998 | -.0350 | -.0143 | .0175 | |
| 151.000 | | | | | | | | | .7786 | | | | | | |
| 156.000 | | | | | | | | .9943 | | | | | | | |
| 162.000 | | | | | | | | | 1.0767 | | | | | | |
| 165.000 | | | | | | | | | | .0797 | -.0789 | -.0290 | .0157 | .0063 | |
| 169.000 | | | | | | | | 1.2670 | | | | | | | |
| 174.000 | | | | | | | 1.0797 | | | | | | | | |
| 180.000 | 1.8598 | .9715 | .6401 | .5456 | .4974 | .4433 | | 1.3387 | | .0043 | -.0748 | .0091 | .0211 | .0093 | |
| 305.000 | | | .6019 | .3041 | .3756 | .4997 | | .3799 | | .2315 | | | | | |
| 320.000 | | | .4233 | .2342 | .7482 | .3046 | | .2275 | | .0349 | .1864 | .0157 | -.0113 | .0904 | .0230 |
| 340.000 | | | .3216 | .2349 | .6493 | .5328 | | -.0556 | | .1299 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0585 | .1000 | .3328 | .3937 | -.1354 | -.1269 | -.1203 | | -.0961 | -.1002 |
| 40.000 | .0179 | .0741 | .4125 | .0175 | -.1939 | -.1498 | -.1546 | | -.1059 | -.1097 |
| 70.000 | .0274 | -.0335 | -.0447 | .0412 | .0000 | .0266 | -.0039 | | | |
| 90.000 | .0209 | .0148 | -.0180 | .1455 | .0310 | -.0161 | -.0206 | | | |
| 105.000 | | | .0000 | .1353 | -.0168 | -.0647 | -.0806 | | | |
| 110.000 | | | | | | | | -.1167 | | |
| 120.000 | -.0421 | .0018 | .1178 | .0943 | .0922 | -.0329 | -.0898 | -.1457 | | |
| 135.000 | | | .0217 | .2341 | .1168 | .0233 | .0012 | | | |
| 150.000 | -.0023 | -.0064 | -.0088 | .2744 | .1503 | .0680 | .0570 | | | |
| 165.000 | .0063 | | -.0006 | | .2792 | .1719 | -.1208 | | | |
| 180.000 | .0192 | .0059 | .026[illegible] | .2891 | | | | | | |
| 320.000 | .0087 | .1353 | .3550 | -.0621 | -.1618 | -.1423 | -.1535 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB37)

ALPHA0( 2) = -4.273 BETA0 ( 1) = -6.424

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5494 | .8295 | .2152 | .4022 | .4749 | .5016 | | .0527 | | .1075 | -.0067 | .0969 | .0205 | .0104 | .0807 |
| 20.000 | | | .3246 | .3434 | .6408 | .5030 | | -.0173 | | .1792 | | | | | |
| 40.000 | | | .5589 | .3755 | .7991 | .3870 | | .3288 | | .0609 | .1365 | -.0003 | .0422 | .1705 | .0168 |
| 55.000 | | | .7099 | .4267 | .5726 | .5538 | | .3744 | | .2859 | | | | | |
| 70.000 | | | .7727 | .4936 | .4832 | .5900 | | .4026 | | .3060 | .0915 | .0834 | .0744 | .0171 | |
| 90.000 | | 1.0076 | .8108 | .5598 | .4217 | .5705 | | .4528 | | .2628 | .1283 | .0794 | .0452 | .0181 | |
| 120.000 | | | .8245 | .6348 | .4806 | .4618 | | .5896 | | .5071 | .1875 | -.0318 | -.0244 | -.0097 | |
| 140.000 | | | | | | | | | | .4880 | | | | | |
| 150.000 | | | .7387 | .5528 | .4816 | .4243 | | | | .2888 | -.0685 | -.0425 | -.0331 | -.0105 | |
| 151.000 | | | | | | | | | 1.1139 | | | | | | |
| 156.000 | | | | | | | | 1.1805 | | | | | | | |
| 162.000 | | | | | | | | | 1.2263 | | | | | | |
| 165.000 | | | | | | | | | | .1186 | -.0533 | -.0475 | -.0338 | -.0208 | |
| 169.000 | | | | | | | | 1.2835 | | | | | | | |
| 174.000 | | | | | | | 1.0289 | | | | | | | | |
| 180.000 | 1.5494 | .9575 | .5950 | .4799 | .4287 | .3850 | | 1.2099 | | .0183 | -.1111 | -.0435 | -.0291 | -.0351 | |
| 305.000 | | | .2680 | .1343 | .2246 | .1170 | | .0639 | | .0530 | | | | | |
| 320.000 | | | .2191 | .1941 | .3826 | .2753 | | -.0384 | | -.0422 | .0632 | -.0720 | -.1031 | -.0597 | -.0805 |
| 340.000 | | | .2174 | .2350 | .3972 | .3582 | | .0350 | | -.0010 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9800 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0196 | .2331 | .4480 | .3183 | -.1486 | -.2329 | -.2117 | | -.1203 | -.1066 |
| 40.000 | -.1086 | .0623 | .1775 | -.0966 | -.2044 | -.1305 | -.1673 | | -.2343 | -.2019 |
| 70.000 | .0472 | -.0135 | -.0144 | -.0117 | .0000 | .0738 | .0430 | | | |
| 90.000 | .0486 | .0373 | .0014 | .1442 | .1037 | .0701 | .0331 | | | |
| 105.000 | | | .0000 | .2121 | .1235 | .0181 | -.0140 | | | |
| 110.000 | | | | | | | | -.0584 | | |
| 120.000 | -.0095 | .0253 | .0092 | .2310 | .2283 | .0833 | .0184 | -.0526 | | |
| 135.000 | | | .0952 | .2232 | .2047 | .0676 | .0314 | | | |
| 150.000 | -.0268 | -.0226 | .1720 | .1732 | -.0042 | .0908 | .1792 | | | |
| 165.000 | -.0313 | | .1614 | | .4248 | .3898 | -.0034 | | | |
| 180.000 | -.0529 | -.0411 | .1247 | .1385 | | | | | | |
| 320.000 | .1101 | .0810 | .4597 | .1061 | -.0706 | -.1452 | -.1530 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET837)

ALPHAO( 2) = -4.268 BETAO ( 2) = -4.362

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5910 | .8245 | .2267 | .2966 | .4426 | .4775 | | .0485 | | .0961 | .0986 | .0542 | .0660 | -.0465 | .0387 |
| 20.000 | | | .3116 | .3045 | .5788 | .4831 | | -.0281 | | .1413 | | | | | |
| 40.000 | | | .5164 | .3388 | .7304 | .3288 | | .2923 | | .0396 | .1256 | .0035 | .0490 | .1464 | .0104 |
| 55.000 | | | .6353 | .3497 | .4524 | .4795 | | .3884 | | .2521 | | | | | |
| 70.000 | | | .6949 | .4279 | .3830 | .5320 | | .3724 | | .2893 | .0651 | .0654 | .0516 | -.0027 | |
| 90.000 | | .9160 | .7379 | .4985 | .3632 | .3952 | | .4207 | | .3197 | .1181 | .0514 | .0156 | .0009 | |
| 120.000 | | | .7639 | .5850 | .4397 | .3979 | | .5759 | | .4565 | .1664 | -.0432 | -.0245 | -.0046 | |
| 140.000 | | | | | | | | | | .4165 | | | | | |
| 150.000 | | | .7072 | .5370 | .4690 | .4145 | | | | .2392 | -.0455 | -.0272 | -.0205 | .0007 | |
| 151.000 | | | | | | | | | .9989 | | | | | | |
| 156.000 | | | | | | | | 1.0316 | | | | | | | |
| 162.000 | | | | | | | | | 1.1614 | | | | | | |
| 165.000 | | | | | | | | | | .1273 | -.0554 | -.0337 | -.0135 | -.0033 | |
| 169.000 | | | | | | | | 1.2439 | | | | | | | |
| 174.000 | | | | | | | .9927 | | | | | | | | |
| 180.000 | 1.5810 | .9489 | .5972 | .4861 | .4387 | .3965 | | 1.2347 | | -.0008 | -.0936 | -.0118 | -.0095 | -.0133 | |
| 305.000 | | | .3490 | .1765 | .2493 | .1452 | | .1481 | | .0713 | | | | | |
| 320.000 | | | .2702 | .2036 | .4442 | .2905 | | .0308 | | .0285 | .1039 | -.0429 | -.0641 | -.0593 | -.0423 |
| 340.000 | | | .2501 | .2649 | .4266 | .3718 | | .0399 | | -.0074 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0887 | .1584 | .4249 | .2971 | -.1429 | -.2202 | -.1970 | | -.1036 | -.0915 |
| 40.000 | -.0686 | .0781 | .1826 | -.0523 | -.1871 | -.1453 | -.1537 | | -.2267 | -.1824 |
| 70.000 | .0357 | -.0155 | -.0192 | .0337 | .0000 | .0604 | .0302 | | | |
| 90.000 | .0401 | .0321 | .0023 | .1509 | .0898 | .0627 | .0299 | | | |
| 105.000 | | | .0000 | .2024 | .0952 | .0062 | -.0241 | | | |
| 110.000 | | | | | | | | -.0677 | | |
| 120.000 | -.0026 | .0327 | .0371 | .2420 | .2246 | .0749 | -.0041 | -.0737 | | |
| 135.000 | | | .1954 | .2597 | .2123 | .0716 | .0259 | | | |
| 150.000 | -.0046 | .0026 | .2034 | .2256 | .0504 | .1635 | .1895 | | | |
| 165.000 | -.0039 | | .1595 | | .4052 | .3485 | -.0174 | | | |
| 180.000 | -.0043 | -.0081 | .0945 | .2082 | | | | | | |
| 320.000 | .0801 | .0411 | .3731 | .1353 | -.0570 | -.1554 | -.1830 | | | |

APC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB37)

ALPHAO( 2) = -4.242 BETAO ( 3) = -.145

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1630 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5636 | .8244 | .8344 | .8183 | .8011 | .4410 | | .0818 | | .0010 | .8410 | -.0818 | -.0135 | -.0790 | .0800 |
| 20.000 | | | .2780 | .8219 | .8882 | .4560 | | .0700 | | .0885 | | | | | |
| 40.000 | | | .4076 | .2120 | .3714 | .2598 | | .2000 | | -.0334 | .0887 | -.0037 | .0182 | .0693 | .0246 |
| 55.000 | | | .4999 | .2348 | .2672 | .3326 | | .3274 | | .1873 | | | | | |
| 70.000 | | | .5459 | .3039 | .2057 | .2138 | | .3294 | | .2501 | .0352 | .0111 | .0074 | -.0335 | |
| 90.000 | | .7690 | .5895 | .3720 | .2408 | .2125 | | .2998 | | .3100 | .0871 | .0179 | -.0299 | -.0263 | |
| 120.000 | | | .6372 | .4760 | .3449 | .2952 | | .3995 | | .2773 | .0887 | -.0849 | -.0306 | -.0053 | |
| 140.000 | | | | | | | | | | .2030 | | | | | |
| 150.000 | | | .6251 | .4855 | .4217 | .3680 | | | | .1449 | -.0876 | -.0433 | -.0129 | .0215 | |
| 151.000 | | | | | | | | | .8688 | | | | | | |
| 155.000 | | | | | | | | .9936 | | | | | | | |
| 162.000 | | | | | | | | | 1.0929 | | | | | | |
| 165.000 | | | | | | | | | | .1059 | -.0945 | -.0289 | .0025 | .0266 | |
| 169.000 | | | | | | | | 1.2788 | | | | | | | |
| 174.000 | | | | | | | 1.0312 | | | | | | | | |
| 190.000 | 1.5635 | .9356 | .5905 | .4803 | .4325 | .3905 | | 1.2938 | | -.0107 | -.0853 | -.0417 | .0094 | .0306 | |
| 305.000 | | | .4666 | .1885 | .3124 | .2390 | | .2701 | | .1564 | | | | | |
| 320.000 | | | .3482 | .2178 | .5319 | .2707 | | .1483 | | .0088 | .1795 | -.0158 | -.0302 | .0206 | -.0045 |
| 340.000 | | | .2944 | .2143 | .5666 | .3823 | | .0555 | | .0752 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0082 | .1746 | .3878 | .3800 | -.1334 | -.2148 | -.1390 | | -.0867 | -.1004 |
| 40.000 | -.0402 | .1208 | .2786 | -.0409 | -.1974 | -.1280 | -.1510 | | -.1137 | -.1104 |
| 70.000 | .0183 | -.0292 | -.0430 | .0719 | .0000 | .0177 | -.0119 | | | |
| 90.000 | .0193 | .0146 | -.0232 | .1152 | .0404 | .0120 | -.0052 | | | |
| 105.000 | | | .0000 | .1474 | .0055 | -.0430 | -.0626 | | | |
| 110.000 | | | | | | | | -.0996 | | |
| 120.000 | -.0071 | .0228 | .0722 | .1821 | .1587 | .0272 | -.0506 | -.1046 | | |
| 135.000 | | | .1017 | .2645 | .1637 | .0462 | .0338 | | | |
| 150.000 | .0136 | .0067 | .0319 | .2622 | .1731 | .1419 | .1249 | | | |
| 165.000 | .0169 | | .0077 | | .3372 | .2330 | - 0763 | | | |
| 180.000 | .0172 | .0108 | .0077 | .3462 | | | | | | |
| 320.000 | .0195 | .1870 | .3018 | .1332 | -.1260 | -.1335 | -.1897 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB37)

ALPHA0( 2) = -4.216 BETA0 ( 4) = 4.041

SECTION ( 11)ORBITER FU AGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5736 | .8375 | .2302 | .2375 | .4760 | .4946 | | .0141 | | .0884 | .1530 | .0080 | -.0820 | .0068 | -.0800 |
| 20.000 | | | .2389 | .2121 | .4210 | .3504 | | .0281 | | -.0259 | | | | | |
| 40.000 | | | .3137 | .2164 | .4380 | .2862 | | .0844 | | -.0040 | .0573 | .0242 | -.0128 | .0141 | .0086 |
| 55.000 | | | .3713 | .1652 | .1847 | .1465 | | .2415 | | .1074 | | | | | |
| 70.000 | | | .4079 | .2002 | .1649 | .1581 | | .1771 | | .1909 | -.0013 | -.0399 | -.0269 | -.0571 | |
| 90.000 | | .6064 | .4487 | .2613 | .1526 | .1366 | | .1430 | | .2783 | .0407 | -.0309 | -.0702 | -.0397 | |
| 120.000 | | | .5049 | .3809 | .2663 | .2187 | | .3054 | | .1900 | -.0271 | -.1411 | -.0447 | -.0391 | |
| 140.000 | | | | | | | | | | .1242 | | | | | |
| 150.000 | | | .5417 | .4498 | .3849 | .3210 | | | | .0925 | -.1123 | -.0549 | -.0279 | .0059 | |
| 151.000 | | | | | | | | | .7038 | | | | | | |
| 155.000 | | | | | | | | .9090 | | | | | | | |
| 162.000 | | | | | | | | | 1.0056 | | | | | | |
| 165.000 | | | | | | | | | | .0516 | -.0941 | -.0443 | -.0053 | .0032 | |
| 169.000 | | | | | | | | 1.1579 | | | | | | | |
| 174.000 | | | | | | | .9771 | | | | | | | | |
| 180.000 | 1.5734 | .8868 | .5685 | .4799 | .4364 | .3872 | | 1.2320 | | -.0089 | -.0918 | -.0096 | -.0037 | -.0055 | |
| 305.000 | | | .5842 | .3033 | .3816 | .4793 | | .3509 | | .2220 | | | | | |
| 320.000 | | | .4246 | .2695 | .7473 | .2922 | | .2249 | | .0334 | .1579 | .0009 | -.0237 | .0871 | .0186 |
| 340.000 | | | .3096 | .2484 | .6108 | .5005 | | -.0593 | | .1235 | | | | | |

| X/LB | .6520 | .7290 | .7750 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0673 | .1138 | .3240 | .3763 | -.1453 | -.1329 | -.1219 | | -.0924 | -.0977 |
| 40.000 | .0132 | .0834 | .4055 | 0371 | -.1815 | -.1426 | -.1483 | | -.1041 | -.1097 |
| 70.000 | .0032 | -.0479 | -.0570 | .0375 | .0000 | -.0027 | -.0281 | | | |
| 90.000 | -.0038 | -.0045 | -.0309 | .1146 | -.0138 | -.0168 | -.0241 | | | |
| 105.000 | | | .0000 | .0616 | -.0413 | -.0779 | -.0929 | | | |
| 110.000 | | | | | | | | -.1219 | | |
| 120.000 | -.0573 | -.0285 | .0884 | .0801 | .0818 | -.0389 | -.0892 | -.1445 | | |
| 135.000 | | | .0043 | .1992 | .0905 | .0093 | -.0181 | | | |
| 150.000 | -.0196 | .0212 | -.0192 | .2291 | .1251 | .0390 | .0290 | | | |
| 165.000 | -.0132 | | .0077 | | .2197 | .1318 | -.1239 | | | |
| 180.000 | .0005 | -.0111 | .0827 | .2307 | | | | | | |
| 320.000 | .0055 | .1454 | .3405 | -.0896 | -.1631 | -.1413 | -.1453 | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB37)

ALPHA0( 2) = -4.212 BETA0 ( 5) = 6.106

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4910 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5305 | .8176 | .2394 | .2347 | .4884 | .4308 | | .0275 | | .0905 | .0781 | -.0192 | -.1361 | -.0073 | -.0579 |
| 20.000 | | | .2272 | .2139 | .3865 | .3302 | | .0282 | | -.0393 | | | | | |
| 40.000 | | | .2692 | .1957 | .3878 | .2537 | | .0217 | | -.0065 | -.0222 | .0197 | -.0243 | -.0217 | .0017 |
| 55.000 | | | .3123 | .1715 | .2092 | .1065 | | .1279 | | .0846 | | | | | |
| 70.000 | | | .3457 | .1530 | .1328 | .1089 | | .1423 | | .1276 | -.0130 | -.0470 | -.0479 | -.0624 | |
| 90.000 | | .5508 | .3897 | .2122 | .1057 | .0997 | | .1023 | | .2148 | -.0120 | -.0440 | -.0827 | -.0505 | |
| 120.000 | | | .4562 | .3303 | .2215 | .1768 | | .2849 | | .1396 | -.0549 | -.1785 | -.0615 | -.0588 | |
| 140.000 | | | | | | | | | | .0722 | | | | | |
| 150.000 | | | .5071 | .4262 | .3570 | .2951 | | | | .0553 | -.1206 | -.0617 | -.0397 | -.0415 | |
| 151.000 | | | | | | | | | .6735 | | | | | | |
| 156.000 | | | | | | | | .9247 | | | | | | | |
| 162.000 | | | | | | | | | .9891 | | | | | | |
| 165.000 | | | | | | | | | | -.0060 | -.0873 | -.0342 | -.0210 | -.0401 | |
| 169.000 | | | | | | | | 1.1887 | | | | | | | |
| 174.000 | | | | | | | .9982 | | | | | | | | |
| 180.000 | 1.5305 | .8926 | .5727 | .4763 | .4272 | .3878 | | 1.2207 | | .0029 | -.0952 | -.0135 | -.0224 | -.0231 | |
| 305.000 | | | .6432 | .3597 | .7314 | .5320 | | .3246 | | .2723 | | | | | |
| 320.000 | | | .4524 | .3184 | .8044 | .3322 | | .2928 | | .0732 | .1752 | -.0050 | .0062 | .0839 | .0190 |
| 340.000 | | | .3273 | .2532 | .6492 | .4449 | | -.0265 | | .1577 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.1421 | .0127 | .3498 | .3095 | -.1885 | -.1337 | -.1280 | | -.0884 | -.0971 |
| 40.000 | .0394 | .0926 | .3498 | .0941 | -.1669 | -.1414 | -.1461 | | -.1064 | -.1108 |
| 70.000 | -.0050 | -.0505 | -.0575 | -.0209 | .0000 | -.0108 | -.0395 | | | |
| 90.000 | -.0114 | -.0090 | -.0431 | .1153 | -.0008 | -.0440 | -.0525 | | | |
| 105.000 | | | .0000 | .1049 | -.0470 | -.0825 | -.0963 | | | |
| 110.000 | | | | | | | | -.1320 | | |
| 120.000 | -.0685 | -.0347 | .0862 | .0274 | .0394 | -.0662 | -.1340 | -.1728 | | |
| 135.000 | | | .0545 | .1490 | .0598 | -.0187 | -.0401 | | | |
| 150.000 | -.0348 | -.0434 | .0069 | .1904 | .1024 | -.0050 | -.0181 | | | |
| 165.000 | -.0311 | | .0512 | | .1603 | .0892 | -.1381 | | | |
| 180.000 | -.0398 | -.0260 | .1185 | .1734 | | | | | | |
| 320.000 | -.0211 | .1455 | .3437 | -.1619 | -.1545 | -.1474 | -.1574 | | | |

ARC97-019 (A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET837)

ALPHA0( 3) = -2.199 BETA0 ( 1) = -6.426

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1860 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4985 | .8010 | .2045 | .6044 | .4092 | .4387 | | .0492 | | .0947 | .0935 | .0716 | .0182 | -.0218 | .0667 |
| 20.000 | | | .3112 | .4312 | .5981 | .4168 | | -.0148 | | .1635 | | | | | |
| 40.000 | | | .5396 | .4279 | .8044 | .3626 | | .3178 | | .0589 | .0921 | -.0127 | .0290 | .1497 | .0161 |
| 55.000 | | | .6798 | .4250 | .7893 | .5226 | | .3293 | | .2637 | | | | | |
| 70.000 | | | .7265 | .4650 | .4791 | .5557 | | .3647 | | .2742 | .0706 | .0623 | .0566 | .0045 | |
| 90.000 | | .9359 | .7546 | .5198 | .4132 | .5429 | | .4144 | | .2306 | .1063 | .0674 | .0304 | .0002 | |
| 120.000 | | | .7549 | .5752 | .4286 | .4400 | | .4962 | | .4649 | .1671 | -.0329 | -.0450 | -.0362 | |
| 140.000 | | | | | | | | | | .4478 | | | | | |
| 150.000 | | | .6654 | .4870 | .4197 | .3736 | | | | .2745 | -.0847 | -.0634 | -.0529 | -.0[illegible]1 | |
| 151.000 | | | | | | | | | 1.0353 | | | | | | |
| 156.000 | | | | | | | | 1.0938 | | | | | | | |
| 162.000 | | | | | | | | | 1.1435 | | | | | | |
| 165.000 | | | | | | | | | | .0957 | -.0685 | -.0647 | -.0604 | -.0421 | |
| 169.000 | | | | | | | | 1.1651 | | | | | | | |
| 174.000 | | | | | | | .9218 | | | | | | | | |
| 180.000 | 1.4585 | .8377 | .5235 | .4161 | .3563 | .3351 | | 1.0922 | | .0062 | -.1201 | -.0680 | -.0499 | -.0491 | |
| 305.000 | | | .2473 | .1543 | .2695 | .0906 | | .0521 | | .0362 | | | | | |
| 320.000 | | | .2093 | .4142 | .3159 | .2424 | | -.0341 | | -.0454 | .0501 | -.0732 | -.1152 | -.0699 | -.0806 |
| 340.000 | | | .2037 | .5286 | .3255 | .3206 | | .0249 | | -.0067 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0225 | .2371 | .4574 | .3262 | -.1320 | -.2204 | -.1885 | | -.0987 | -.0904 |
| 40.000 | -.0809 | .0814 | .1638 | -.1103 | -.1796 | -.1089 | -.1421 | | -.1922 | -.1852 |
| 70.000 | .0209 | -.0264 | -.0304 | -.0321 | .0000 | .0557 | .0293 | | | |
| 90.000 | .0292 | .0165 | -.0130 | .0958 | .0875 | .0557 | .0236 | | | |
| 105.000 | | | .0000 | .1855 | .1126 | .0111 | -.0172 | | | |
| 110.000 | | | | | | | | -.0633 | | |
| 120.000 | -.0374 | -.0078 | -.0220 | .1934 | .1897 | .0674 | .0089 | -.0536 | | |
| 135.000 | | | .1063 | .1790 | .1689 | .0470 | .0122 | | | |
| 150.000 | -.0465 | -.0378 | .1600 | .1354 | -.0231 | .0553 | .1091 | | | |
| 165.000 | -.0491 | | .1479 | | .3638 | .3426 | -.0105 | | | |
| 180.000 | -.0585 | -.0486 | .1153 | .0992 | | | | | | |
| 320.000 | .1069 | .0713 | .4571 | .1351 | -.0656 | -.1318 | -.1364 | | | |

ARC87-019 IA81 LVAP(ALLML SCALED) ORB. FUSELAGE (RET837)

ALPHA0( 3) = -2.186 BETA0 ( 2) = -2.253

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0480 | .0700 | .1120 | .1500 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5149 | .7941 | .2348 | .6237 | .3229 | .3880 | | .0443 | | .0043 | .2200 | -.0263 | -.0088 | -.1031 | -.0303 |
| 20.000 | | | .2784 | .6073 | .4023 | .4048 | | -.0045 | | .0719 | | | | | |
| 40.000 | | | .4390 | .3841 | .5384 | .2848 | | .2335 | | -.0069 | .0835 | -.0262 | .0257 | .0918 | -.0209 |
| 55.001 | | | .5432 | .3484 | .5453 | .3970 | | .3100 | | .1895 | | | | | |
| 70.000 | | | .5841 | .3451 | .3424 | .3868 | | .2877 | | .2286 | .0238 | .0115 | .0014 | -.0462 | |
| 90.000 | | .7887 | .6195 | .4066 | .2831 | .3011 | | .3475 | | .2604 | .0666 | .0185 | -.0272 | -.0469 | |
| 120.000 | | | .6473 | .4818 | .3522 | .2974 | | .4652 | | .3768 | .1067 | -.0798 | -.0597 | -.0338 | |
| 140.000 | | | | | | | | | | .3294 | | | | | |
| 150.030 | | | .6100 | .4643 | .3961 | .3310 | | | | .1753 | -.0806 | -.0620 | -.0410 | -.0162 | |
| 151.000 | | | | | | | | | .8678 | | | | | | |
| 156.000 | | | | | | | | .9054 | | | | | | | |
| 162.000 | | | | | | | | | 1.0670 | | | | | | |
| 165.000 | | | | | | | | | | .0894 | -.1025 | -.0492 | -.0338 | -.0142 | |
| 168.000 | | | | | | | | 1.1512 | | | | | | | |
| 174.000 | | | | | | | .8995 | | | | | | | | |
| 180.000 | 1.5148 | .8832 | .5378 | .4377 | .3851 | .3373 | | 1.1656 | | -.0289 | -.1091 | -.0423 | -.0177 | -.0112 | |
| 305.000 | | | .3758 | .2447 | .3811 | .1801 | | .1977 | | .0888 | | | | | |
| 320.000 | | | .2698 | .4574 | .4305 | .2021 | | .0923 | | .0307 | .1203 | -.0387 | -.0729 | -.0454 | -.0403 |
| 340.000 | | | .2473 | .5888 | .3852 | .3097 | | .0424 | | .0152 | | | | | |

| X/LB | .8520 | .7280 | .7790 | .8210 | .8790 | .9210 | .9800 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0508 | .1324 | .4498 | .3301 | -.1344 | -.2056 | -.1508 | | -.0720 | -.0820 |
| 40.000 | -.0198 | .1277 | .2733 | -.0506 | -.1878 | -.1509 | -.1274 | | -.1541 | -.1050 |
| 70.000 | -.0058 | -.0434 | -.0509 | .0291 | .0000 | .0110 | -.0124 | | | |
| 90.000 | -.7031 | .0026 | -.0287 | .1048 | .0442 | .0147 | -.0144 | | | |
| 105.000 | | | .0000 | .1549 | .0345 | -.0367 | -.0614 | | | |
| 110.000 | | | | | | | | -.1028 | | |
| 120.000 | -.0296 | .0143 | .0786 | .1946 | .1765 | .0287 | -.0396 | -.1028 | | |
| 135.000 | | | .1684 | .2258 | .1614 | .0281 | -.0024 | | | |
| 150.000 | -.0162 | -.0133 | .1833 | .2084 | .0435 | .1199 | .1278 | | | |
| 165.000 | -.0152 | | .1014 | | .3118 | .2366 | -.0590 | | | |
| 180.000 | -.0158 | -.0170 | -.0008 | .2594 | | | | | | |
| 320.000 | .0445 | .1586 | .3500 | .1570 | -.0780 | -.1418 | -.1783 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET837)

ALPHAO( 3) = -2.171 BETAO ( 3) = 1.947

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1860 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5006 | .8090 | .2416 | .5792 | .2707 | .3878 | | .0174 | | .0164 | .1968 | -.0111 | -.0518 | -.0244 | -.0198 |
| 20.000 | | | .2542 | .5674 | .3148 | .2841 | | .0247 | | .0105 | | | | | |
| 40.000 | | | .3383 | .4489 | .4187 | .0994 | | .1380 | | -.0588 | .0488 | .0654 | -.0184 | .0141 | .0097 |
| 55.000 | | | .3987 | .2714 | .3901 | .1482 | | .2365 | | .1258 | | | | | |
| 70.000 | | | .4360 | .2270 | .2318 | .2207 | | .2591 | | .1777 | -.0049 | -.0320 | -.0322 | -.0680 | |
| 90.000 | | .6384 | .4743 | .2840 | .1825 | .1924 | | .1665 | | .2460 | .0329 | -.0214 | -.0621 | -.0592 | |
| 120.000 | | | .5257 | .3888 | .2675 | .2193 | | .2989 | | .2115 | .0177 | -.1173 | -.0602 | -.0329 | |
| 140.000 | | | | | | | | | | .1201 | | | | | |
| 150.000 | | | .5293 | .4151 | .3506 | .2937 | | | | .1081 | -.1162 | -.0746 | -.0276 | -.0024 | |
| 151.000 | | | | | | | | | .7607 | | | | | | |
| 156.000 | | | | | | | | 1.0962 | | | | | | | |
| 162.000 | | | | | | | | | .9337 | | | | | | |
| 165.000 | | | | | | | | | | .0594 | -.1155 | -.0605 | -.0098 | .0043 | |
| 169.000 | | | | | | | | 1.0844 | | | | | | | |
| 174.000 | | | | | | | .8538 | | | | | | | | |
| 180.000 | 1.5008 | .8450 | .5130 | .4240 | .3775 | .3343 | | 1.1555 | | -.0294 | -.1069 | -.0496 | -.0099 | .0040 | |
| 305.000 | | | .4927 | .3155 | .4647 | .3328 | | .2929 | | .1529 | | | | | |
| 320.000 | | | .3510 | .3828 | .5396 | .1908 | | .1632 | | .0014 | .1373 | -.0309 | -.0332 | .0378 | -.0124 |
| 340.000 | | | .2754 | .5267 | .3702 | .3366 | | -.0368 | | .0720 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0325 | .2010 | .3463 | .3490 | -.1239 | -.1561 | -.1335 | | -.1009 | -.1042 |
| 40.000 | -.0141 | .0670 | .3594 | .0348 | -.1891 | -.1340 | -.1704 | | -.0912 | -.0992 |
| 70.000 | -.0201 | -.0583 | -.0698 | .0231 | .0000 | -.0214 | -.0465 | | | |
| 90.000 | -.0245 | -.0188 | -.0489 | .0638 | -.0042 | -.0183 | -.0331 | | | |
| 105.000 | | | .0000 | .0792 | -.0247 | -.0731 | -.0910 | | | |
| 110.000 | | | | | | | | -.1218 | | |
| 120.000 | -.0436 | -.0321 | .0533 | .1161 | .1033 | -.0057 | -.0783 | -.1349 | | |
| 135.000 | | | .0234 | .2055 | .1047 | .0208 | -.0157 | | | |
| 150.000 | -.0175 | -.0247 | -.0227 | .2139 | .1299 | .0626 | .0543 | | | |
| 165.000 | -.0141 | | -.0271 | | .2529 | .1410 | -.1205 | | | |
| 180.000 | -.0104 | -.0168 | -.0234 | .2781 | | | | | | |
| 320.000 | .0331 | .1596 | .3510 | -.0271 | -.1413 | -.1406 | -.1623 | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET837)

ALPHAO( 3) = -2.150 BETAO ( 4) = 6.083

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5059 | .8018 | .2182 | .6051 | .4046 | .3568 | | .0382 | | .0729 | .0743 | -.0370 | -.1400 | -.0395 | -.0858 |
| 20.000 | | | .2010 | .5275 | .3017 | .2903 | | .0217 | | -.0532 | | | | | |
| 40.000 | | | .2458 | .2357 | .3107 | .2145 | | .0122 | | -.0174 | .0024 | -.0078 | -.0411 | -.0362 | -.0042 |
| 55.000 | | | .2847 | .1895 | .2971 | .0791 | | .1064 | | .0627 | | | | | |
| 70.000 | | | .3129 | .1404 | .1394 | .1337 | | .1156 | | .1350 | -.0327 | -.0658 | -.0608 | -.0854 | |
| 90.000 | | .5264 | .3598 | .1908 | .0945 | .0968 | | .0939 | | .2075 | .0091 | -.0572 | -.0937 | -.0690 | |
| 120.000 | | | .4134 | .2914 | .1879 | .1466 | | .2525 | | .1280 | -.0529 | -.1738 | -.0720 | -.0684 | |
| 140.000 | | | | | | | | | | .0561 | | | | | |
| 150.000 | | | .4534 | .3715 | .3086 | .2534 | | | | .0465 | -.1367 | -.0799 | -.0523 | -.0407 | |
| 151.000 | | | | | | | | | .6155 | | | | | | |
| 156.000 | | | | | | | | .8373 | | | | | | | |
| 162.000 | | | | | | | | | .9369 | | | | | | |
| 165.000 | | | | | | | | | | -.0284 | -.1115 | -.0579 | -.0414 | -.0534 | |
| 169.000 | | | | | | | | 1.0974 | | | | | | | |
| 174.000 | | | | | | | .9010 | | | | | | | | |
| 180.000 | 1.5059 | .8127 | .5117 | .4187 | .3728 | .3405 | | 1.1285 | | -.0131 | -.1115 | -.0450 | -.0460 | -.0430 | |
| 305.000 | | | .6335 | .3771 | .7373 | .5042 | | .2857 | | .2469 | | | | | |
| 320.000 | | | .4391 | .3635 | .7524 | .2993 | | .2893 | | .0607 | .1495 | -.0257 | -.0115 | .0387 | .0126 |
| 340.000 | | | .3007 | .4457 | .5604 | .3714 | | -.0328 | | .1436 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.1485 | .0481 | .3412 | .3160 | -.1901 | -.1260 | -.1206 | | -.0841 | -.0922 |
| 40.000 | .0397 | .1030 | .3537 | .1053 | -.1668 | -.1360 | -.1364 | | -.0955 | -.1012 |
| 70.000 | -.0306 | -.0702 | -.0776 | -.0178 | .0000 | -.0319 | -.0592 | | | |
| 90.000 | -.0373 | -.0296 | -.0581 | .0804 | -.0238 | -.0615 | -.0626 | | | |
| 105.000 | | | .0000 | .0639 | -.0722 | -.0994 | -.1156 | | | |
| 110.000 | | | | | | | | -.1427 | | |
| 120.000 | -.0869 | -.0655 | .0626 | .0141 | .0292 | -.0753 | -.1380 | -.1682 | | |
| 135.000 | | | .0421 | .1172 | .0383 | -.0354 | -.0586 | | | |
| 150.000 | -.0521 | -.0578 | .0229 | .1525 | .0820 | -.0287 | -.0475 | | | |
| 165.000 | -.0484 | | .0495 | | .1229 | .0554 | -.1481 | | | |
| 180.000 | -.0497 | -.0440 | .1046 | .1384 | | | | | | |
| 320.000 | -.0263 | .1611 | .3049 | -.1508 | -.1485 | -.1310 | -.1233 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB37)

ALPHAO( 4) = -.138 BETAO ( 1) = -6.431

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4097 | .7791 | .3021 | .6150 | .3344 | .3522 | | .0692 | | .0807 | .0121 | .0558 | -.0039 | -.0200 | .0419 |
| 20.000 | | | .2968 | .6938 | .5382 | .3353 | | -.0160 | | .1482 | | | | | |
| 40.000 | | | .5249 | .6974 | .7594 | .3254 | | .3013 | | .0521 | .0717 | -.0312 | .0062 | .1143 | .0011 |
| 55.000 | | | .6633 | .5333 | .7794 | .4869 | | .2941 | | .2390 | | | | | |
| 70.000 | | | .7055 | .4666 | .6330 | .5171 | | .3318 | | .2449 | .0492 | .0416 | .0322 | -.0079 | |
| 90.000 | | .9030 | .7271 | .4975 | .4627 | .5152 | | .3751 | | .1912 | .0843 | .0499 | .0164 | -.0181 | |
| 120.000 | | | .7078 | .5323 | .3897 | .4023 | | .4150 | | .4297 | .1455 | -.0417 | -.0663 | -.0667 | |
| 140.000 | | | | | | | | | | .4188 | | | | | |
| 150.000 | | | .6077 | .4335 | .3695 | .3386 | | | | .2474 | -.1040 | -.0929 | -.0762 | -.0642 | |
| 151.000 | | | | | | | | | .9789 | | | | | | |
| 156.000 | | | | | | | | 1.0306 | | | | | | | |
| 162.000 | | | | | | | | | 1.0813 | | | | | | |
| 165.000 | | | | | | | | | | .0661 | -.0865 | -.0870 | -.0897 | -.0635 | |
| 169.000 | | | | | | | | 1.0797 | | | | | | | |
| 174.000 | | | | | | | .8386 | | | | | | | | |
| 180.000 | 1.4097 | .7958 | .4680 | .3622 | .3144 | .2869 | | .9897 | | -.0084 | -.1309 | -.0969 | -.0742 | -.0652 | |
| 305.000 | | | .2301 | .2678 | .2328 | .0742 | | .0279 | | .0214 | | | | | |
| 320.000 | | | .2462 | .4053 | .2670 | .2132 | | -.0390 | | -.0594 | .0254 | -.0887 | -.1327 | -.0759 | -.0746 |
| 340.000 | | | .2939 | .5218 | .2613 | .2613 | | .0151 | | -.0054 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0245 | .2554 | .4527 | .3114 | -.1254 | -.2200 | -.1720 | | -.0860 | -.0816 |
| 40.000 | -.0465 | .0787 | .2069 | -.1170 | -.1570 | -.0902 | -.1315 | | -.1778 | -.1778 |
| 70.000 | .0121 | -.0374 | -.0469 | -.0478 | .0000 | .0377 | .0121 | | | |
| 90.000 | .0128 | -.0016 | -.0300 | .0080 | .0776 | .0467 | .0051 | | | |
| 105.000 | | | .0000 | .1582 | .1182 | .0118 | -.0301 | | | |
| 110.000 | | | | | | | | -.0773 | | |
| 120.000 | -.0635 | -.0488 | -.0599 | .1471 | .1494 | .0526 | -.0006 | -.0646 | | |
| 135.000 | | | .0953 | .1340 | .1326 | .0228 | -.0090 | | | |
| 150.000 | -.0669 | -.0525 | .1283 | .0927 | -.0556 | .0215 | .0228 | | | |
| 165.000 | -.0682 | | .1195 | | .3069 | .2953 | -.0241 | | | |
| 180.000 | -.0702 | -.0632 | .0953 | .0622 | | | | | | |
| 320.000 | .1059 | .0433 | .4376 | .1719 | -.0539 | -.1278 | -.1392 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB37)

ALPHA0( 41 = -.135 BETA0 ( 2) = -4.375

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .6740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4512 | .7836 | .3694 | .5959 | .2541 | .3598 | | .0464 | | .0554 | .0967 | .0142 | .0259 | -.0889 | .0090 |
| 20.000 | | | .3502 | .6343 | .4098 | .3688 | | -.0395 | | .1141 | | | | | |
| 40.000 | | | .4832 | .6288 | .5959 | .2851 | | .2703 | | .0229 | .0745 | -.0412 | .0071 | .0909 | -.0149 |
| 55.000 | | | .5896 | .4866 | .6146 | .4272 | | .2890 | | .2030 | | | | | |
| 70.000 | | | .6289 | .4128 | .4604 | .4640 | | .3028 | | .2168 | .0201 | .0178 | .0107 | -.0402 | |
| 90.000 | | .8196 | .6509 | .4374 | .3712 | .4732 | | .3409 | | .2244 | .0642 | .0291 | -.0162 | -.0458 | |
| 120.000 | | | .6532 | .4909 | .3585 | .3721 | | .4262 | | .3970 | .1249 | -.0652 | -.0797 | -.0692 | |
| 140.000 | | | | | | | | | | .3354 | | | | | |
| 150.000 | | | .5808 | .4243 | .3618 | .3190 | | | | .2177 | -.0962 | -.0820 | -.0803 | -.0491 | |
| 151.000 | | | | | | | | | .9101 | | | | | | |
| 156.000 | | | | | | | | .9415 | | | | | | | |
| 162.000 | | | | | | | | | 1.0267 | | | | | | |
| 165.000 | | | | | | | | | | .0805 | -.0956 | -.0846 | -.0678 | -.0481 | |
| 169.000 | | | | | | | | 1.0263 | | | | | | | |
| 174.000 | | | | | | | .8063 | | | | | | | | |
| 180.000 | 1.4512 | .7986 | .4724 | .3751 | .3293 | .2987 | | 1.0303 | | -.0249 | -.1317 | -.0639 | -.0553 | -.0504 | |
| 305.000 | | | .2967 | .2936 | .2788 | .0975 | | .1059 | | .0331 | | | | | |
| 320.000 | | | .3241 | .4364 | .3077 | .2277 | | .0209 | | .0006 | .0695 | -.0754 | -.1109 | -.0846 | -.0605 |
| 340.000 | | | .3496 | .5267 | .2373 | .2513 | | .0376 | | -.0346 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0415 | .1720 | .4635 | .3066 | -.1221 | -.2207 | -.1605 | | -.0572 | -.0826 |
| 40.000 | -.0135 | .0962 | .2541 | -.0550 | -.1606 | -.1278 | -.1122 | | -.1714 | -.1634 |
| 70.000 | -.0118 | -.0599 | -.0604 | -.0449 | .0000 | .0132 | -.0056 | | | |
| 90.000 | -.0095 | -.0182 | -.0371 | .0940 | .0514 | .0159 | -.0123 | | | |
| 105.000 | | | .0000 | .1418 | .0722 | -.0217 | -.0475 | | | |
| 110.000 | | | | | | | | -.0914 | | |
| 120.000 | -.0518 | -.0240 | -.0082 | .1585 | .1632 | .0350 | -.0281 | -.0877 | | |
| 135.000 | | | .1478 | .1621 | .1561 | .0239 | -.0204 | | | |
| 150.000 | -.0481 | -.0321 | .1599 | .1410 | -.0103 | .0511 | .0993 | | | |
| 165.000 | -.0457 | | .1411 | | .2917 | .2643 | -.0375 | | | |
| 180.000 | -.0454 | -.0459 | .1081 | .1283 | | | | | | |
| 320.000 | .0660 | .0553 | .4027 | .1840 | -.0690 | -.1364 | -.1712 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET837)

ALPHAO( 4) = -.128 BETAO ( 3) = -.174

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4157 | .7684 | .3930 | .4851 | .3571 | .2383 | | .0503 | | -.0427 | .1968 | -.0273 | -.0506 | -.1279 | .0253 |
| 20.000 | | | .3264 | .5032 | .4513 | .2513 | | .0532 | | -.0094 | | | | | |
| 40.000 | | | .3644 | .4618 | .5239 | .1418 | | .1865 | | -.0437 | .0541 | -.0250 | -.0068 | .0310 | -.0325 |
| 55.000 | | | .4380 | .3213 | .4545 | .2383 | | .2541 | | .1376 | | | | | |
| 70.000 | | | .4682 | .2618 | .2661 | .2849 | | .2354 | | .1752 | -.0120 | -.0293 | -.0378 | -.0759 | |
| 90.000 | | .6693 | .5003 | .3073 | .2176 | .2290 | | .2827 | | .2180 | .0305 | -.0193 | -.0628 | -.0769 | |
| 120.000 | | | .5302 | .3867 | .2706 | .2303 | | .3707 | | .3097 | .0614 | -.1095 | -.0958 | -.0535 | |
| 140.000 | | | | | | | | | | .2264 | | | | | |
| 150.000 | | | .5082 | .3801 | .3255 | .2746 | | | | .1112 | -.1046 | -.0932 | -.0608 | -.0238 | |
| 151.000 | | | | | | | | | .7439 | | | | | | |
| 156.000 | | | | | | | | .8101 | | | | | | | |
| 162.000 | | | | | | | | | .9821 | | | | | | |
| 165.000 | | | | | | | | | | .0494 | -.1305 | -.0575 | -.0381 | -.0197 | |
| 169.000 | | | | | | | | 1.0915 | | | | | | | |
| 174.000 | | | | | | | .8542 | | | | | | | | |
| 180.000 | 1.4157 | .7838 | .4623 | .3738 | .3348 | .2945 | | 1.1082 | | -.0469 | -.1269 | -.0756 | -.0216 | -.0174 | |
| 305.000 | | | .4629 | .3854 | .3900 | .1558 | | .2246 | | .1075 | | | | | |
| 320.000 | | | .5098 | .4414 | .3860 | .1724 | | .1113 | | .0016 | .1420 | -.0634 | -.0549 | -.0187 | -.0251 |
| 340.000 | | | .4664 | .4595 | .3301 | .2021 | | .0318 | | .0497 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0207 | .1997 | .3445 | .2818 | -.1311 | -.1916 | -.1281 | | -.0799 | -.0994 |
| 40.000 | -.0473 | .1386 | .2552 | .0026 | -.1863 | -.1021 | -.1473 | | -.0990 | -.1091 |
| 70.000 | -.0359 | -.0702 | -.0799 | .0168 | .0000 | -.0264 | -.0495 | | | |
| 90.000 | -.0261 | -.0281 | -.0597 | .0589 | -.0005 | -.0257 | -.0448 | | | |
| 105.000 | | | .0000 | .1026 | -.0193 | -.0708 | -.0895 | | | |
| 110.000 | | | | | | | | -.1254 | | |
| 120.000 | -.0476 | -.0126 | .1158 | .1328 | .1315 | .0062 | -.0700 | -.1248 | | |
| 135.000 | | | .0979 | .1880 | .1241 | .0122 | -.0123 | | | |
| 150.000 | -.0325 | -.0334 | -.0210 | .1944 | .0537 | .0686 | .0797 | | | |
| 165.000 | -.0278 | | -.0348 | | .2661 | .1555 | -.1073 | | | |
| 180.000 | -.0271 | -.0307 | -.0341 | .2742 | | | | | | |
| 320.000 | .0300 | .1939 | .3566 | .1305 | -.1179 | -.1335 | -.1889 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB37)

ALPHAO( 4) = -.113 BETAC ( 4) = 4.000

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4689 | .7658 | .1960 | .6272 | .3369 | .4072 | | .0281 | | .0277 | .0977 | -.0521 | -.0999 | -.0307 | -.1147 |
| 20.000 | | | .1973 | .5631 | .3223 | .2982 | | .0402 | | -.0690 | | | | | |
| 40.000 | | | .257 | .4680 | .3900 | .1635 | | .0928 | | -.0375 | .0346 | -.0182 | -.0498 | -.0268 | -.0123 |
| 55.000 | | | .3048 | .2289 | .3598 | .0766 | | .1803 | | .0645 | | | | | |
| 70.000 | | | .3341 | .1804 | .1768 | .1651 | | .1809 | | .1329 | -.0451 | -.0697 | -.0617 | -.1015 | |
| 90.000 | | .5364 | .3737 | .2073 | .1422 | .1352 | | .1023 | | .1957 | .0054 | -.0584 | -.0893 | -.0844 | |
| 120.000 | | | .4206 | .3017 | .1964 | .1575 | | .2628 | | .1784 | -.0275 | -.1298 | -.0824 | -.0610 | |
| 140.000 | | | | | | | | | | .0834 | | | | | |
| 150.000 | | | .4367 | .3422 | .2879 | .2317 | | | | .0522 | -.1391 | -.0827 | -.0571 | -.0317 | |
| 151.000 | | | | | | | | | .6030 | | | | | | |
| 156.000 | | | | | | | | .8055 | | | | | | | |
| 162.000 | | | | | | | | | .8822 | | | | | | |
| 165.000 | | | | | | | | | | .0024 | -.1261 | -.0758 | -.0419 | -.0294 | |
| 169.000 | | | | | | | | .9990 | | | | | | | |
| 174.000 | | | | | | | .8302 | | | | | | | | |
| 180.000 | 1.4689 | .7700 | .4574 | .3651 | .3255 | .2862 | | 1.0640 | | -.0438 | -.1288 | -.0597 | -.0475 | -.0374 | |
| 305.000 | | | .5453 | .3621 | .6608 | .4118 | | .2714 | | .1848 | | | | | |
| 320.000 | | | .3887 | .3455 | .6924 | .2353 | | .2191 | | .0014 | .1319 | -.0551 | -.0521 | .0529 | -.0062 |
| 340.000 | | | .2698 | .5792 | .4957 | .3847 | | -.0528 | | .0898 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0505 | .1711 | .3219 | .3378 | -.1524 | -.1346 | -.1249 | | -.0989 | -.1053 |
| 40.000 | .0039 | .0868 | .3913 | .0585 | -.1709 | -.1325 | -.1521 | | -.0933 | -.1020 |
| 70.000 | -.0519 | -.0851 | -.0941 | -.0041 | .0000 | -.0505 | -.0726 | | | |
| 90.000 | -.0549 | -.0489 | -.0698 | .0299 | -.0354 | -.0384 | -.0514 | | | |
| 105.000 | | | .0000 | .0218 | -.0999 | -.0986 | -.1118 | | | |
| 110.000 | | | | | | | | -.1410 | | |
| 120.000 | -.0878 | -.0739 | .0292 | .0621 | .0578 | -.0528 | -.1064 | -.1551 | | |
| 135.000 | | | -.0173 | .1438 | .0571 | -.0196 | -.0528 | | | |
| 150.000 | -.0522 | -.0580 | -.0072 | .1482 | .0857 | -.0062 | -.0233 | | | |
| 165.000 | -.0475 | | .0568 | | .1324 | .0593 | -.1403 | | | |
| 180.000 | -.0408 | -.0496 | .1003 | .1580 | | | | | | |
| 320.000 | .0240 | .1481 | .3263 | -.0606 | -.1631 | -.1611 | -.1132 | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET837)

ALPHA0( 4) = -.090 BETA0 ( 5) = 6.061

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1590 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4352 | .7778 | .3040 | .6829 | .2733 | .2259 | | .0468 | | .0578 | .0899 | -.0628 | -.1458 | -.0673 | -.0890 |
| 20.000 | | | .2764 | .5979 | .1970 | .1844 | | -.0086 | | -.0568 | | | | | |
| 40.000 | | | .2299 | .4872 | .2202 | .1771 | | .016 | | -.0506 | .0521 | -.0360 | -.0765 | -.0588 | -.0404 |
| 55.000 | | | .2528 | .2451 | .2335 | .0581 | | .0926 | | .0377 | | | | | |
| 70.000 | | | .2784 | .1990 | .1954 | .1058 | | .0827 | | .1090 | -.0545 | -.0850 | -.0759 | -.1094 | |
| 90.000 | | .4883 | .3246 | .1625 | .1320 | .1022 | | .0752 | | .0840 | -.0022 | -.0749 | -.1077 | -.0916 | |
| 120.000 | | | .3781 | .2597 | .1556 | .1257 | | .2423 | | .1244 | -.0598 | -.1761 | -.0883 | -.0791 | |
| 140.000 | | | | | | | | | | .0402 | | | | | |
| 150.000 | | | .4080 | .3201 | .2647 | .2119 | | | | .0273 | -.1509 | -.0920 | -.0699 | -.0531 | |
| 151.000 | | | | | | | | | .5699 | | | | | | |
| 156.000 | | | | | | | | .7936 | | | | | | | |
| 162.000 | | | | | | | | | .8774 | | | | | | |
| 165.000 | | | | | | | | | | -.0559 | -.1330 | -.0795 | -.0601 | -.0695 | |
| 169.000 | | | | | | | | 1.0287 | | | | | | | |
| 174.000 | | | | | | | .8277 | | | | | | | | |
| 180.000 | 1.4352 | .7634 | .4582 | .3612 | .3237 | .2919 | | 1.0441 | | -.0317 | -.1334 | -.0772 | -.0719 | -.0648 | |
| 305.000 | | | .6190 | .5256 | .6677 | .4893 | | .2559 | | .2158 | | | | | |
| 320.000 | | | .4166 | .7683 | .6035 | .2574 | | .2748 | | .0455 | .1088 | -.0437 | -.0349 | -.0136 | -.0038 |
| 340.000 | | | .3157 | .7322 | .4123 | .2972 | | -.0384 | | .1214 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.1577 | .0766 | .3375 | .3534 | -.1923 | -.1287 | -.1208 | | -.0845 | -.0943 |
| 40.000 | .0307 | .1081 | .3446 | .1113 | -.1701 | -.1368 | -.1402 | | -.0873 | -.0963 |
| 70.000 | -.0568 | -.0907 | -.0998 | -.0287 | .0000 | -.0558 | -.0765 | | | |
| 90.000 | -.0608 | -.0504 | -.0752 | .0500 | -.0568 | -.0699 | -.0741 | | | |
| 105.000 | | | .0000 | .0214 | -.0917 | -.1143 | -.1255 | | | |
| 110.000 | | | | | | | | -.1526 | | |
| 120.000 | -.1031 | -.0873 | .0551 | .0054 | .0195 | -.0849 | -.1419 | -.1711 | | |
| 135.000 | | | .0500 | .0908 | .0239 | -.0490 | -.0759 | | | |
| 150.000 | -.0712 | -.0755 | .0457 | .1123 | .0639 | -.0513 | -.0718 | | | |
| 165.000 | -.0692 | | .0662 | | .0875 | .0221 | -.1590 | | | |
| 180.000 | -.0665 | -.0637 | .0985 | .0899 | | | | | | |
| 320.000 | -.0236 | .1652 | .2857 | -.1008 | -.1502 | -.1322 | -.1187 | | | |

ARC97-013 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB37)

ALPHAO( 5) = 1.918 BETAO ( 1) = -6.431

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3479 | .7555 | .3637 | .6412 | .2682 | .2653 | | .0700 | | .0650 | .0003 | .0296 | -.0149 | -.0258 | 0.44 |
| 20.000 | | | .3850 | .7187 | .4682 | .2653 | | -.0244 | | .1286 | | | | | |
| 40.000 | | | .5077 | .7658 | .7012 | .2893 | | .2770 | | .0376 | .0272 | -.0503 | -.0112 | .0933 | 0110 |
| 55.000 | | | .6405 | .6811 | .7394 | .4501 | | .2730 | | .2077 | | | | | |
| 70.000 | | | .6746 | .5420 | .6432 | .4777 | | .2958 | | .2183 | .0159 | .0173 | .0112 | -.0093 | |
| 90.000 | | .8623 | .6871 | .4797 | .4804 | .4744 | | .3350 | | .1461 | .0572 | .0283 | -.0023 | -.0317 | |
| 120.000 | | | .6589 | .4909 | .3653 | .4210 | | .3601 | | .3824 | .1178 | -.0528 | -.0891 | -.1072 | |
| 140.000 | | | | | | | | | | .3914 | | | | | |
| 150.000 | | | .5541 | .3814 | .3190 | .2997 | | | | .2183 | -.1282 | -.1277 | -.1000 | -.0939 | |
| 151.000 | | | | | | | | | .9252 | | | | | | |
| 156.000 | | | | | | | | 1.0492 | | | | | | | |
| 162.000 | | | | | | | | | 1.0173 | | | | | | |
| 165.000 | | | | | | | | | | .0292 | -.1142 | -.1079 | -.1158 | -.0879 | |
| 169.000 | | | | | | | | 1.0249 | | | | | | | |
| 174.000 | | | | | | | .7786 | | | | | | | | |
| 180.000 | 1.3478 | .7331 | .4157 | .3081 | .2850 | .2433 | | .9104 | | -.0350 | -.1522 | -.1211 | -.0976 | -.0852 | |
| 305.000 | | | .2410 | .2675 | .2050 | .0780 | | .0109 | | .0023 | | | | | |
| 320.000 | | | .3348 | .4108 | .2260 | .1830 | | -.0375 | | -.0553 | .0096 | -.1049 | -.1455 | -.0684 | -.0935 |
| 340.000 | | | .3581 | .5410 | .2017 | .1823 | | .0251 | | -.0040 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0355 | .2497 | .4594 | .2948 | -.1253 | -.2245 | -.1670 | | -.0560 | -.0738 |
| 40.000 | -.0240 | .0799 | .2506 | -.1133 | -.1608 | -.0563 | -.1202 | | -.1845 | -.1755 |
| 70.000 | -.0045 | -.0569 | -.0674 | -.0681 | .0000 | .0232 | -.0046 | | | |
| 90.000 | -.0031 | -.0166 | -.0465 | -.0357 | .0714 | .0289 | -.0171 | | | |
| 105.000 | | | .0000 | .1101 | .1105 | -.0022 | -.0466 | | | |
| 110.000 | | | | | | | | -.0927 | | |
| 120.000 | -.1003 | -.1062 | -.0897 | .0832 | .1345 | .0354 | -.0157 | -.0745 | | |
| 135.000 | | | .0636 | .0923 | .0984 | .0055 | -.0339 | | | |
| 150.000 | -.0828 | -.0758 | .0939 | .0491 | -.0862 | -.0120 | -.0228 | | | |
| 165.000 | -.0838 | | .0872 | | .2580 | .2508 | -.0402 | | | |
| 180.000 | -.0818 | -.0752 | .0713 | .0285 | | | | | | |
| 320.000 | .0930 | -.0093 | .4280 | .2138 | -.0507 | -.1283 | -.1485 | | | |

APC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET837)

ALPHA0( 5) = 1.916 BETA0 ( 2) = -2.268

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3808 | .7718 | .5847 | .5364 | .1883 | .2433 | | .0283 | | -.0216 | .1721 | -.0341 | -.0372 | -.1068 | -.0402 |
| 20.000 | | | .5949 | .5733 | .2409 | .2640 | | -.0494 | | .0499 | | | | | |
| 40.000 | | | .5808 | .5773 | .4312 | .2340 | | .2198 | | -.0150 | .0370 | -.0711 | -.0148 | .0433 | -.0436 |
| 55.000 | | | .5729 | .5031 | .4731 | .3397 | | .2320 | | .1552 | | | | | |
| 70.000 | | | .5509 | .4200 | .4029 | .3637 | | .2403 | | .1508 | -.0132 | -.0265 | -.0349 | -.0765 | |
| 90.000 | | .7315 | .5614 | .3877 | .3228 | .3113 | | .2779 | | .1802 | .0187 | -.0112 | -.0547 | -.0857 | |
| 120.000 | | | .5562 | .4121 | .2880 | .2813 | | .3910 | | .3152 | .0720 | -.0969 | -.1059 | -.0950 | |
| 140.000 | | | | | | | | | | .3009 | | | | | |
| 150.000 | | | .5066 | .3597 | .2983 | .2530 | | | | .1608 | -.1170 | -.1055 | -.0897 | -.0550 | |
| 151.000 | | | | | | | | | .7744 | | | | | | |
| 156.000 | | | | | | | | .7820 | | | | | | | |
| 162.000 | | | | | | | | | .9443 | | | | | | |
| 165.000 | | | | | | | | | | .0484 | -.1253 | -.0973 | -.0765 | -.0503 | |
| 169.000 | | | | | | | | .9617 | | | | | | | |
| 174.000 | | | | | | | .7236 | | | | | | | | |
| 180.000 | 1.3808 | .7476 | .4311 | .3278 | .2847 | .2463 | | 1.0058 | | -.0598 | -.1373 | -.0791 | -.0577 | -.0453 | |
| 305.000 | | | .4547 | .3278 | .3480 | .1003 | | .1512 | | .0560 | | | | | |
| 320.000 | | | .5654 | .4448 | .3750 | .1486 | | .0823 | | -.0032 | .1035 | -.0752 | -.0989 | -.0796 | -.0460 |
| 340.000 | | | .5927 | .5087 | .2670 | .1380 | | .0259 | | -.0049 | | | | | |

| X/LB | 6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0303 | .1359 | .4399 | .2760 | -.1395 | -.2056 | -.1609 | | -.0627 | -.0714 |
| 40.000 | .0297 | .1234 | .2645 | .0083 | -.1510 | -.1439 | -.1188 | | -.1671 | -.1453 |
| 70.000 | -.0423 | -.0765 | -.0897 | -.0427 | .0000 | -.0295 | -.0411 | | | |
| 90.000 | -.0312 | -.0352 | -.0664 | .0681 | .0100 | -.0244 | -.0496 | | | |
| 105.000 | | | .0000 | .1009 | .0255 | -.0535 | -.0859 | | | |
| 110.000 | | | | | | | | -.1212 | | |
| 120.000 | -.0450 | -.0292 | .0992 | .1173 | .1193 | -.0079 | -.0533 | -.1155 | | |
| 135.000 | | | .1253 | .1406 | .1271 | -.0021 | -.0482 | | | |
| 150.000 | -.0544 | -.0390 | .1270 | .1392 | .0090 | .0698 | .0490 | | | |
| 165.000 | -.0537 | | .1107 | | .2158 | .1758 | -.0728 | | | |
| 180.000 | -.0510 | -.0536 | .0587 | .1929 | | | | | | |
| 320.000 | .0276 | .1567 | .3673 | .1935 | -.0750 | -.1222 | -.1837 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RE1837)

ALPHAO( 5) = 1.931 BETAO ( 3) = 1.934

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3948 | .7370 | .4117 | .5130 | .1535 | .2658 | | .0339 | | -.0364 | .1797 | -.0691 | -.0689 | -.0857 | -.0324 |
| 20.000 | | | .4407 | .5133 | .2421 | .1494 | | .0253 | | -.0390 | | | | | |
| 40.000 | | | .4222 | .5041 | .3307 | .1614 | | .0936 | | -.0618 | .0122 | -.0148 | -.0597 | -.0270 | -.0051 |
| 55.000 | | | .3609 | .4118 | .3587 | .1000 | | .1854 | | .0804 | | | | | |
| 70.000 | | | .3779 | .3097 | .3004 | .1494 | | .2005 | | .1270 | -.0428 | -.0605 | -.0679 | -.1065 | |
| 90.000 | | .5446 | .3966 | .2578 | .2281 | .1751 | | .1628 | | .1728 | -.0075 | -.0527 | -.0867 | -.1049 | |
| 120.000 | | | .4289 | .3050 | .2054 | .1927 | | .2731 | | .2091 | .0258 | -.1326 | -.1101 | -.0722 | |
| 140.000 | | | | | | | | | | .1231 | | | | | |
| 150.000 | | | .4216 | .3157 | .2605 | .2114 | | | | .0698 | -.1437 | -.1019 | -.0523 | -.0409 | |
| 151.000 | | | | | | | | | .6794 | | | | | | |
| 156.000 | | | | | | | | .8658 | | | | | | | |
| 162.000 | | | | | | | | | .0437 | | | | | | |
| 165.000 | | | | | | | | | | .0148 | -.1437 | -.0861 | -.0409 | -.0371 | |
| 169.000 | | | | | | | | .9626 | | | | | | | |
| 174.000 | | | | | | | .7400 | | | | | | | | |
| 180.000 | 1.3948 | .8982 | .4065 | .3220 | .2825 | .2411 | | .9928 | | -.0661 | -.1394 | -.0768 | -.0432 | -.0371 | |
| 305.000 | | | .4466 | .3623 | .5038 | .3155 | | .2316 | | .1374 | | | | | |
| 320.000 | | | .3979 | .4939 | .5315 | .1520 | | .1557 | | -.0278 | .1115 | -.0689 | -.0676 | -.0085 | -.0512 |
| 340.000 | | | .3873 | .5051 | .3556 | .2675 | | -.0308 | | .0425 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0438 | .1943 | .3514 | .3349 | -.1113 | -.1201 | -.1127 | | -.0935 | -.1006 |
| 40.000 | -.0041 | .1006 | .3737 | .0801 | -.1757 | -.1362 | -.1615 | | -.1040 | -.1090 |
| 70.000 | -.0637 | -.0935 | -.1001 | -.0093 | .0000 | -.0621 | -.0849 | | | |
| 90.000 | -.0549 | -.0543 | -.0846 | .0156 | -.0388 | -.0523 | -.0563 | | | |
| 105.000 | | | .0000 | .0399 | -.0577 | -.0992 | -.1161 | | | |
| 110.000 | | | | | | | | -.1450 | | |
| 120.000 | -.0738 | -.0421 | -.0043 | .0727 | .0886 | -.0296 | -.0999 | -.1437 | | |
| 135.000 | | | .0200 | .1641 | .0852 | -.0169 | -.0397 | | | |
| 150.000 | -.0549 | -.0593 | -.0407 | .1610 | .0906 | .0131 | .0155 | | | |
| 165.000 | -.0526 | | -.0600 | | .1907 | .0885 | -.1302 | | | |
| 180.000 | -.0492 | -.0532 | -.0549 | .2322 | | | | | | |
| 320.000 | .0410 | .1901 | 3271 | .0593 | -.1332 | -.1289 | -.1272 | | | |

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

ARC97-019 1A81 LVAP(ALLML SEALED) ORB. FUSELAGE (RET837)

ALPHA0( S) = 1.943 BETA0 ( W) = 6.065

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3431 | .7580 | .6517 | .5390 | .1517 | .1355 | | .0267 | | .0336 | .0673 | -.1182 | -.1512 | -.0951 | -.0892 |
| 20.000 | | | .5990 | .4415 | .0906 | .0658 | | -.0331 | | -.0598 | | | | | |
| 40.000 | | | .4657 | .3812 | .1203 | .1265 | | .0148 | | -.0544 | .0480 | -.0499 | -.0911 | -.0941 | -.0316 |
| 55.000 | | | .3555 | .2995 | .1550 | .0539 | | .0765 | | .0111 | | | | | |
| 70.000 | | | .2934 | .2538 | .1744 | .0598 | | .0735 | | .0778 | -.0729 | -.0975 | -.0878 | -.1254 | |
| 90.000 | | .4344 | .2834 | .2047 | .1517 | .0921 | | .0544 | | .1454 | -.0249 | -.0901 | -.1188 | -.1093 | |
| 120.000 | | | .3308 | .2224 | .1415 | .1291 | | .2243 | | .1016 | -.0695 | -.1700 | -.1026 | -.0907 | |
| 140.000 | | | | | | | | | | .0297 | | | | | |
| 150.000 | | | .3585 | .2758 | .2242 | .1768 | | | | .0160 | -.1601 | -.1066 | -.0884 | -.0553 | |
| 151.000 | | | | | | | | | .5447 | | | | | | |
| 156.000 | | | | | | | | .7574 | | | | | | | |
| 162.000 | | | | | | | | | .8324 | | | | | | |
| 165.000 | | | | | | | | | | -.0742 | -.1481 | -.0950 | -.0785 | -.0791 | |
| 169.000 | | | | | | | | .9536 | | | | | | | |
| 174.000 | | | | | | | .7312 | | | | | | | | |
| 180.000 | 1.3431 | .6882 | .4074 | .3148 | .2785 | .2489 | | .9671 | | -.0582 | -.1481 | -.1013 | -.0894 | -.0831 | |
| 305.000 | | | .7047 | .6130 | .6214 | .4266 | | .2659 | | .1892 | | | | | |
| 320.000 | | | .7061 | .6675 | .5106 | .2459 | | .2619 | | .0437 | .0387 | -.0584 | -.0514 | -.0097 | -.0084 |
| 340.000 | | | .7005 | .6034 | .2949 | .1952 | | -.0351 | | .0813 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .300 | -.1578 | .1180 | .3344 | .3385 | -.1805 | -.1172 | -.1214 | | -.0810 | -.0997 |
| 40.000 | .0324 | .1042 | .3321 | .1202 | -.1526 | -.1216 | -.1345 | | -.0776 | -.0897 |
| 70.000 | -.0734 | -.1034 | -.1080 | -.0319 | .0000 | -.0730 | -.0928 | | | |
| 90.000 | -.0778 | -.0650 | -.0759 | .0191 | -.0653 | -.0703 | -.0903 | | | |
| 105.000 | | | .0000 | .0046 | -.1014 | -.1253 | -.1311 | | | |
| 110.000 | | | | | | | | -.1567 | | |
| 120.000 | -.1118 | -.0935 | .0532 | .0177 | .0140 | -.0749 | -.1247 | -.1675 | | |
| 135.000 | | | .0532 | .0771 | .0191 | -.0530 | -.0813 | | | |
| 150.000 | -.0821 | -.0847 | .0499 | .0825 | .0430 | -.0655 | -.0877 | | | |
| 165.000 | -.0808 | | .0600 | | .0471 | -.0390 | -.1601 | | | |
| 180.000 | -.0811 | -.0745 | .0779 | .0397 | | | | | | |
| 320.000 | -.0030 | .1573 | .2922 | -.0524 | -.1489 | -.1032 | -.0955 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB37)

ALPHA0( 6) = 4.018 BETA0 ( 1) = -6.417

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2870 | .7389 | .6002 | .5769 | .1842 | .2039 | | .0583 | | .0419 | -.0069 | -.0018 | -.0337 | -.0347 | .0104 |
| 20.000 | | | .6185 | .6733 | .3729 | .2042 | | -.0314 | | .1015 | | | | | |
| 40.000 | | | .6674 | .7382 | .6326 | .2651 | | .2602 | | .0289 | -.0330 | -.0601 | .0273 | .0699 | .0044 |
| 55.000 | | | .6704 | .7077 | .6933 | .4091 | | .2592 | | .1855 | | | | | |
| 70.000 | | | .6625 | .6071 | .6025 | .4352 | | .2564 | | .1939 | -.0049 | -.0073 | -.0117 | .0066 | |
| 90.000 | | .8205 | .6534 | .5271 | .4995 | .4284 | | .2982 | | .1241 | .0314 | .0109 | -.0219 | -.0335 | |
| 120.000 | | | .6093 | .4609 | .3603 | .3620 | | .3080 | | .3325 | .0922 | -.0658 | -.1069 | -.1350 | |
| 140.000 | | | | | | | | | | .3435 | | | | | |
| 150.000 | | | .5007 | .3335 | .2849 | .2621 | | | | .2028 | -.1414 | -.1507 | -.1222 | -.1173 | |
| 151.000 | | | | | | | | | .8452 | | | | | | |
| 156.000 | | | | | | | | .9150 | | | | | | | |
| 162.000 | | | | | | | | | .9532 | | | | | | |
| 165.000 | | | | | | | | | | .0080 | -.1275 | -.1284 | -.1343 | -.1078 | |
| 168.000 | | | | | | | | .9943 | | | | | | | |
| 174.000 | | | | | | | .7623 | | | | | | | | |
| 180.000 | 1.2870 | .6671 | .3626 | .2597 | .2267 | .2045 | | .0520 | | -.0508 | -.1638 | -.1395 | -.1147 | -.1022 | |
| 305.000 | | | .3504 | .2359 | .1592 | .0821 | | .0024 | | -.0192 | | | | | |
| 320.000 | | | .4993 | .3838 | .1612 | .1400 | | -.0320 | | -.0690 | .0007 | -.1245 | -.1543 | -.0387 | -.0287 |
| 340.000 | | | .5966 | .4792 | .1330 | .1039 | | .0508 | | -.0139 | | | | | |

| X/LB | .0520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0846 | .2417 | .4862 | .3066 | -.1168 | -.2244 | -.1575 | | .0004 | -.0726 |
| 40.000 | .0385 | .1348 | .3056 | -.0867 | -.1601 | -.0780 | -.1271 | | -.1823 | -.1746 |
| 70.000 | -.0066 | -.0619 | -.0753 | -.0793 | .0000 | .0021 | -.0238 | | | |
| 90.000 | -.0060 | -.0277 | -.0582 | -.0495 | .0521 | .0145 | -.0343 | | | |
| 105.000 | | | .0000 | .0199 | .0949 | -.0173 | -.0540 | | | |
| 110.000 | | | | | | | | -.1077 | | |
| 120.000 | -.1443 | -.1541 | -.0397 | .0319 | .0973 | .0095 | -.0288 | -.0880 | | |
| 135.000 | | | .0072 | .0373 | .0872 | -.0096 | -.0430 | | | |
| 150.000 | -.0982 | -.0951 | .0588 | .0273 | -.0703 | .0015 | -.0142 | | | |
| 165.000 | -.0985 | | .0632 | | .2293 | .2399 | -.0406 | | | |
| 180.000 | -.0995 | -.0864 | .0454 | .0296 | | | | | | |
| 320.000 | .0980 | .0233 | .4802 | .2568 | -.0327 | -.1238 | -.1531 | | | |

APC97-019 1A81 (VAPIALLHL SEALED) ORB. FUSELAGE (RETB37)

ALPHA0( 61 = 4.022 BETA0 ( 21 = -4.361

SECTION ( 11ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3467 | .8063 | .6372 | .4934 | .1218 | .2137 | | .0679 | | .0143 | .0985 | -.0261 | -.0217 | -.0660 | -.0022 |
| 20.000 | | | .6680 | .5780 | .2762 | .2101 | | -.0467 | | .0792 | | | | | |
| 40.000 | | | .6394 | .6449 | .5193 | .2227 | | .2586 | | .0107 | -.0152 | -.0913 | -.0198 | .0423 | .0042 |
| 55.000 | | | .6644 | .5921 | .5589 | .3636 | | .2330 | | .1481 | | | | | |
| 70.000 | | | .6255 | .5042 | .4793 | .3923 | | .2291 | | .1599 | -.0287 | -.0251 | -.0342 | -.0358 | |
| 90.000 | | .7402 | .6045 | .4527 | .4035 | .3901 | | .2596 | | .1509 | .0335 | -.0389 | -.0519 | -.0139 | |
| 120.000 | | | .5689 | .4248 | .3139 | .3145 | | .2792 | | .1182 | .0776 | -.0857 | -.1259 | -.1333 | |
| 140.000 | | | | | | | | | | .3133 | | | | | |
| 150.000 | | | .4791 | .3282 | .2734 | .2403 | | | | .1827 | -.1375 | -.1346 | -.1241 | -.0935 | |
| 151.000 | | | | | | | | | .7891 | | | | | | |
| 156.000 | | | | | | | | .7944 | | | | | | | |
| 162.000 | | | | | | | | | .8997 | | | | | | |
| 165.000 | | | | | | | | | | .0235 | -.1297 | -.1261 | -.1139 | -.0882 | |
| 169.000 | | | | | | | | .8771 | | | | | | | |
| 174.000 | | | | | | | .6631 | | | | | | | | |
| 180.000 | 1.3467 | .6683 | .3705 | .2725 | .2353 | .2078 | | .8560 | | -.0572 | -.1621 | -.1054 | -.0959 | -.0799 | |
| 305.000 | | | .4355 | .2699 | .2204 | .0708 | | .0815 | | .0042 | | | | | |
| 320.000 | | | .5547 | .3917 | .2134 | .1192 | | .0189 | | -.0215 | .0533 | -.1011 | -.1425 | -.0719 | -.0173 |
| 340.000 | | | .6347 | .4459 | .1219 | .0937 | | .0140 | | -.0545 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0780 | .3058 | .5058 | .4639 | -.1024 | -.2172 | -.1236 | | -.0509 | -.0696 |
| 40.000 | .0838 | .1341 | .3066 | -.0179 | -.1524 | -.1105 | -.1246 | | -.1815 | -.1851 |
| 70.000 | -.0343 | -.0829 | -.0918 | -.0881 | .0000 | -.0168 | -.0391 | | | |
| 90.000 | -.0340 | -.0494 | -.0716 | -.0352 | .0430 | .0000 | -.0455 | | | |
| 105.000 | | | .0000 | .1044 | .0752 | -.0312 | -.0735 | | | |
| 110.000 | | | | | | | | -.1192 | | |
| 120.000 | -.1120 | -.0908 | -.0243 | .0853 | .1202 | .0041 | -.0442 | -.1031 | | |
| 135.000 | | | .0052 | .0048 | .0030 | -.0173 | -.0569 | | | |
| 150.000 | -.0728 | -.0599 | .0778 | .0545 | -.0718 | -.0448 | -.0267 | | | |
| 165.000 | -.0732 | | .0845 | | .1780 | .1613 | -.0894 | | | |
| 180.000 | -.0772 | -.0893 | .0782 | .0852 | | | | | | |
| 320.000 | .0400 | .1292 | .5705 | .2528 | -.0752 | -.1192 | -.1635 | | | |

ARC97-019 !A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET837)

ALPHAO( 6) = 4.025 BETAO ( 3) = -.168

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5[illegible] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2636 | .9232 | .6707 | .5199 | .0697 | .0948 | | .0091 | | .0625 | .1530 | -.0378 | -.0778 | -.0667 | [illegible] |
| 20.000 | | | .6583 | .5655 | .1167 | .0932 | | -.0306 | | .0035 | | | | | |
| 40.000 | | | .6116 | .5255 | .2713 | .1809 | | .1842 | | -.0477 | -.0176 | -.0371 | -.0550 | -.0056 | [illegible] |
| 55.000 | | | .5479 | .4186 | .3176 | .2610 | | .1819 | | .1101 | | | | | |
| 70.000 | | | .5018 | .3570 | .2998 | .2170 | | .1861 | | .1107 | -.0414 | -.0613 | -.0778 | -.0956 | |
| 90.000 | | .6037 | .4763 | .3282 | .2587 | .2130 | | .2225 | | .1487 | -.0166 | -.0[illegible] | -.0[illegible] | -.1[illegible] | |
| 120.000 | | | .4577 | .3358 | .2286 | .2067 | | .3327 | | .2435 | .0313 | -.1241 | -.1257 | -.1[illegible] | |
| 140.000 | | | | | | | | | | .2159 | | | | | |
| 150.000 | | | .4097 | .2971 | .2461 | .2090 | | | | .2872 | -..340 | -.1238 | -.1011 | -.0612 | |
| 151.000 | | | | | | | | | .6453 | | | | | | |
| 156.000 | | | | | | | | .6701 | | | | | | | |
| 162.000 | | | | | | | | | .8520 | | | | | | |
| 165.000 | | | | | | | | | | .0102 | -.1525 | -.1002 | -.0749 | -.0559 | |
| 169.000 | | | | | | | | .8883 | | | | | | | |
| 174.000 | | | | | | | .6745 | | | | | | | | |
| 180.000 | 1.2636 | .6380 | .3537 | .2842 | .2511 | .2177 | | .9246 | | -.0745 | -.1532 | -.1005 | -.0608 | -.0535 | |
| 305.000 | | | .5446 | .3955 | .2653 | .1677 | | .1792 | | .0879 | | | | | |
| 320.000 | | | .6589 | .4983 | .1829 | .1359 | | .1058 | | -.0546 | .0859 | -.0847 | -.0601 | -.0435 | -.0375 |
| 340.000 | | | .7022 | .4730 | .0674 | .0866 | | -.0247 | | .0505 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1004 | .2312 | .3607 | .2767 | -.1573 | -.1523 | -.1115 | | -.0591 | -.1024 |
| 40.000 | .0117 | .1931 | .2868 | .0777 | -.1720 | -.1295 | -.1446 | | -.1351 | -.1064 |
| 70.000 | -.0616 | -.0953 | -.1100 | -.0213 | .0000 | -.0621 | -.0781 | | | |
| 90.000 | -.0495 | -.0562 | -.0831 | .0327 | -.0282 | -.0607 | -.0824 | | | |
| 105.000 | | | .0000 | .0542 | -.0322 | -.0872 | -.1102 | | | |
| 110.000 | | | | | | | | -.1439 | | |
| 120.000 | -.0522 | -.0365 | .0847 | .0945 | .0767 | -.0245 | -.0868 | -.1329 | | |
| 135.000 | | | .0834 | .1206 | .0801 | -.0112 | -.0386 | | | |
| 150.000 | -.0692 | -.0522 | .0515 | .1495 | .0372 | .0531 | .0360 | | | |
| 165.000 | -.0676 | | -.0499 | | .2306 | .1159 | -.0965 | | | |
| 180.000 | -.0649 | -.0657 | -.0573 | .2323 | | | | | | |
| 320.000 | .0549 | .1878 | .4736 | .1123 | -.0946 | -.1219 | -.1640 | | | |

IA818 - PRESSURE SOURCE DATA TABULATION

ARC97-019 IA81 LVAP:ALLHL SEALED) ORB. FUSELAGE



ALPHAO( 6) = 4.034 BETAO ( 4) = 3.991 (RET837)

SECTION ( 1)ORBITER FUSELAGE

DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3025 | .7879 | .6749 | .4963 | .1142 | .1747 | | | | | | | | | |
| 20.000 | | | .6289 | .4626 | .1020 | .1015 | | .0167 | | -.0113 | .0753 | -.0980 | -.1173 | -.0320 | -.1070 |
| 40.000 | | | .5394 | .4426 | .1840 | .1419 | | .0031 | | -.0899 | | | | | |
| 55.000 | | | .4463 | .3396 | .2138 | .0657 | | .0561 | | -.0893 | .0158 | -.0394 | -.0983 | -.0491 | .0244 |
| 70.000 | | | .3760 | .2847 | .2191 | .0800 | | .1324 | | .0263 | | | | | |
| 90.000 | | .4577 | .3396 | .2522 | .1880 | .1147 | | .1679 | | .0794 | -.0778 | -.0980 | -.0933 | -.1337 | |
| 120.000 | | | .3349 | .2459 | .1700 | .1485 | | .1125 | | .1338 | -.0368 | -.0874 | -.1153 | -.1261 | |
| 140.000 | | | | | | | | .2166 | | .1207 | -.0219 | -.1586 | -.1271 | -.0950 | |
| 150.000 | | | .3359 | .2522 | .2084 | .1697 | | | | .0611 | | | | | |
| 151.000 | | | | | | | | | | .0320 | -.1635 | -.1196 | -.0812 | -.0559 | |
| 156.000 | | | | | | | | | .5404 | | | | | | |
| 162.000 | | | | | | | | .6659 | | | | | | | |
| 165.000 | | | | | | | | | .7851 | | | | | | |
| 169.000 | | | | | | | | | | -.0312 | -.1542 | -.1074 | -.0720 | -.0652 | |
| 174.000 | | | | | | | | .8508 | | | | | | | |
| 180.000 | 1.3025 | .6422 | .3608 | .2724 | .2373 | .2084 | .6655 | | | | | | | | |
| 305.000 | | | .6661 | .5560 | .4841 | .3472 | | .9145 | | -.0745 | -.1578 | -.0999 | -.0865 | -.0702 | |
| 320.000 | | | .7185 | .6264 | .4193 | .2134 | | .2163 | | .1342 | | | | | |
| 340.000 | | | .7218 | .5534 | .2356 | .1664 | | .2055 | | -.0063 | .0211 | -.0878 | -.0809 | -.0040 | -.0294 |
| | | | | | | | | -.0778 | | .0591 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0030 | .1998 | .3541 | .3688 | -.1364 | -.1143 | -.1324 | | | |
| 40.000 | .0016 | .1223 | .4519 | .0901 | -.1545 | -.0962 | -.1447 | | -.0946 | -.1035 |
| 70.000 | -.0782 | -.1065 | -.1139 | -.0313 | .0000 | -.0774 | -.0985 | | -.0989 | -.1099 |
| 90.000 | -.0736 | -.0772 | -.0991 | -.0105 | -.0574 | -.0641 | -.0799 | | | |
| 105.000 | | | .0000 | .0116 | -.0952 | -.1213 | -.1334 | | | |
| 110.000 | | | | | | | | -.1588 | | |
| 120.000 | -.1090 | -.0635 | .0083 | .0451 | .0602 | -.0498 | -.1230 | -.1681 | | |
| 135.000 | | | .0505 | .1157 | .0561 | -.0462 | -.0635 | | | |
| 150.000 | -.0849 | -.0853 | .0565 | .0699 | .0250 | -.0375 | -.0552 | | | |
| 165.000 | -.0816 | | .0770 | | .0518 | .0073 | -.1538 | | | |
| 180.000 | -.0766 | -.0726 | .0764 | .0933 | | | | | | |
| 320.000 | .0367 | .1951 | .3255 | .0143 | -.1524 | -.0936 | -.1354 | | | |

ARC97-019 !A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET837)

ALPHAO( 6) = 4.038 BETAO ( 5) = 6.064

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2596 | .8766 | .6838 | .4646 | .0704 | .1143 | | -.0132 | | .0272 | .0531 | -.1362 | -.1564 | -.0912 | -.0921 |
| 20.000 | | | .6316 | .3658 | .0833 | .0371 | | -.0160 | | -.0697 | | | | | |
| 40.000 | | | .5129 | .3334 | .0945 | .0974 | | .0076 | | -.0798 | .0309 | -.0635 | -.1046 | -.0397 | .0157 |
| 55.000 | | | .3990 | .2494 | .1256 | .0421 | | .0475 | | -.0111 | | | | | |
| 70.000 | | | .3449 | .2345 | .1481 | .0428 | | .0753 | | .0521 | -.0893 | -.1084 | -.1027 | -.1413 | |
| 90.000 | | .4016 | .3102 | .2163 | .1405 | .0566 | | .0488 | | .1123 | -.0490 | -.1049 | -.1292 | -.1279 | |
| 120.000 | | | .2963 | .2199 | .1388 | .1156 | | .1755 | | .0782 | -.0794 | -.1646 | -.1223 | -.1043 | |
| 140.000 | | | | | | | | | | .0124 | | | | | |
| 150.000 | | | .3082 | .2398 | .1965 | .1504 | | | | .0035 | -.1732 | -.1259 | -.1053 | -.0781 | |
| 151.000 | | | | | | | | | .5029 | | | | | | |
| 156.000 | | | | | | | | .7540 | | | | | | | |
| 162.000 | | | | | | | | | .7576 | | | | | | |
| 165.000 | | | | | | | | | | -.0827 | -.1629 | -.1122 | -.0961 | -.0874 | |
| 169.000 | | | | | | | | .8425 | | | | | | | |
| 174.000 | | | | | | | .6343 | | | | | | | | |
| 180.000 | 1.2596 | .6166 | .3572 | .2761 | .2419 | .2097 | | .8562 | | -.0635 | -.1603 | -.1226 | -.1086 | -.0991 | |
| 305.000 | | | .7373 | .6290 | .6012 | .4174 | | .2521 | | .1634 | | | | | |
| 320.000 | | | .7587 | .6909 | .4797 | .2462 | | .2377 | | .0299 | -.0285 | -.0804 | -.0145 | -.0170 | -.0033 |
| 340.000 | | | .7463 | .5786 | .1935 | .2044 | | -.0422 | | .0197 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.1465 | .1458 | .3354 | .3702 | -.1702 | -.1062 | -.1304 | | -.0844 | -.0991 |
| 40.000 | .0384 | .1286 | .4325 | .1489 | -.1424 | -.1186 | -.1425 | | -.0771 | -.0958 |
| 70.000 | -.0731 | -.1055 | -.1146 | -.0469 | .0000 | -.0808 | -.1014 | | | |
| 90.000 | -.0764 | -.0751 | -.0961 | -.0110 | -.0751 | -.0791 | -.0857 | | | |
| 105.000 | | | .0000 | -.0043 | -.1176 | -.1384 | -.1431 | | | |
| 110.000 | | | | | | | | -.1658 | | |
| 120.000 | -.1272 | -.0837 | .0467 | .0210 | .0240 | -.0683 | -.1264 | -.1692 | | |
| 135.000 | | | .0517 | .0729 | .0294 | -.0493 | -.0817 | | | |
| 150.000 | -.0941 | -.0955 | .0427 | .0615 | .0233 | -.0686 | -.0920 | | | |
| 165.000 | -.0944 | | .0467 | | .0123 | -.0413 | -.1642 | | | |
| 180.000 | -.0914 | -.0871 | .0517 | .0260 | | | | | | |
| 320.000 | .0167 | .1878 | .3012 | -.0225 | -.1471 | -.0753 | -.1515 | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB37)

ALPHAO( 7) = 6.134 BETAO ( 1) = -4.334

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2853 | .9468 | .6820 | .4543 | .0715 | .1197 | | .0416 | | .0032 | .1033 | -.0412 | -.0358 | -.0509 | .0476 |
| 20.000 | | | .7179 | .5757 | .2241 | .1499 | | -.0505 | | .0549 | | | | | |
| 40.000 | | | .7486 | .6761 | .5472 | .1860 | | .2394 | | -.0027 | -.0540 | -.1010 | .0656 | .0499 | -.0064 |
| 55.000 | | | .6876 | .6038 | .5907 | .3383 | | .2041 | | .1295 | | | | | |
| 70.000 | | | .6289 | .5255 | .5014 | .3535 | | .2024 | | .1354 | -.0451 | -.0521 | -.0532 | -.0316 | |
| 90.000 | | .7166 | .5956 | .4535 | .4151 | .3492 | | .2240 | | .1134 | .0012 | -.0224 | -.0679 | -.0535 | |
| 120.000 | | | .5376 | .4017 | .2999 | .2777 | | .2316 | | .2726 | .0541 | -.0924 | -.1360 | -.1585 | |
| 140.000 | | | | | | | | | | .2861 | | | | | |
| 150.000 | | | .4372 | .2905 | .2423 | .2085 | | | | .1440 | -.1559 | -.1559 | -.1402 | -.1102 | |
| 151.000 | | | | | | | | | .7506 | | | | | | |
| 156.000 | | | | | | | | .7868 | | | | | | | |
| 162.000 | | | | | | | | | .8429 | | | | | | |
| 165.000 | | | | | | | | | | -.0002 | -.1493 | -.1412 | -.1294 | -.1035 | |
| 169.000 | | | | | | | | .8047 | | | | | | | |
| 174.000 | | | | | | | .6011 | | | | | | | | |
| 180.000 | 1.2853 | .6110 | .3271 | .2423 | .2065 | .1770 | | .7724 | | -.0709 | -.1741 | -.1229 | -.1130 | -.0932 | |
| 305.000 | | | .4430 | .2765 | .1903 | .0366 | | .0771 | | -.0147 | | | | | |
| 320.000 | | | .6005 | .4036 | .1277 | .1029 | | -.0047 | | -.0273 | .0421 | -.1212 | -.1517 | -.0405 | .0319 |
| 340.000 | | | .6777 | .3914 | .0956 | .0767 | | -.0047 | | -.0567 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9800 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0837 | .3129 | .5156 | .5009 | -.0979 | -.2057 | -.1095 | | -.0551 | -.0591 |
| 40.000 | .1053 | .1718 | .3318 | .0144 | -.1458 | -.1284 | -.1696 | | -.1921 | -.1467 |
| 70.000 | -.0308 | -.0833 | -.0961 | -.0947 | .0000 | -.0245 | -.0507 | | | |
| 90.000 | -.0328 | -.0475 | -.0746 | -.0559 | .0330 | -.0101 | -.0611 | | | |
| 105.000 | | | .0000 | .0760 | .0699 | -.0446 | -.0891 | | | |
| 110.000 | | | | | | | | -.1332 | | |
| 120.000 | -.1568 | -.1459 | .0097 | .0418 | .0886 | -.0133 | -.0571 | -.1115 | | |
| 135.000 | | | .0432 | .0726 | .0903 | -.0267 | -.0557 | | | |
| 150.000 | -.0859 | -.0295 | .0339 | .0468 | -.0915 | -.0537 | -.0771 | | | |
| 165.000 | -.0852 | | .0372 | | .1419 | .1256 | -.0918 | | | |
| 180.000 | -.0842 | -.0562 | .0509 | .0464 | | | | | | |
| 320.000 | .0553 | .2076 | .5995 | .4184 | -.0383 | -.1105 | -.1549 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET837)

ALPHAO( 7) = 6.130 BETAO ( 2) = -2.240

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2677 | 1.0487 | .7514 | .4039 | -.0324 | .1018 | | .0227 | | .0122 | .1380 | -.0395 | -.0748 | -.1027 | .0417 |
| 20.000 | | | .7912 | .4652 | .0242 | .1349 | | -.0812 | | .0106 | | | | | |
| 40.000 | | | .7729 | .5776 | .2710 | .1743 | | .2318 | | -.0225 | -.0653 | -.1100 | -.0037 | .0343 | .0046 |
| 55.000 | | | .6542 | .5124 | .4118 | .2902 | | .1692 | | .1158 | | | | | |
| 70.000 | | | .5839 | .4213 | .3528 | .3107 | | .1892 | | .1023 | -.0614 | -.0676 | -.0788 | -.0493 | |
| 90.000 | | .6866 | .5467 | .3952 | .3104 | .3041 | | .2099 | | .1210 | -.0121 | -.0411 | -.0843 | -.1053 | |
| 120.000 | | | .4954 | .3528 | .2425 | .2366 | | .2580 | | .2418 | .0299 | -.1129 | -.1430 | -.1492 | |
| 140.000 | | | | | | | | | | .2359 | | | | | |
| 150.000 | | | .4130 | .2720 | .2203 | .1978 | | | | .1115 | -.1503 | -.1440 | -.1289 | -.0921 | |
| 151.000 | | | | | | | | | .6733 | | | | | | |
| 156.000 | | | | | | | | .6916 | | | | | | | |
| 162.000 | | | | | | | | | .7959 | | | | | | |
| 165.000 | | | | | | | | | | .0047 | -.1506 | -.1355 | -.1125 | -.0884 | |
| 169.000 | | | | | | | | .7825 | | | | | | | |
| 174.000 | | | | | | | .5937 | | | | | | | | |
| 180.000 | 1.2677 | .6094 | .3275 | .2423 | .2048 | .1899 | | .8303 | | -.0898 | -.1648 | -.1158 | -.0870 | -.0800 | |
| 305.000 | | | .4950 | .3405 | .1780 | .1114 | | .1364 | | .0219 | | | | | |
| 320.000 | | | .6945 | .4445 | .0826 | .1150 | | .0292 | | -.0772 | .0951 | -.1135 | -.1096 | -.0760 | .0307 |
| 340.000 | | | .7666 | .4039 | -.0243 | .0631 | | .0214 | | .0490 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0608 | .2300 | .4890 | .3285 | -.1222 | -.2237 | -.1510 | | -.0619 | -.0493 |
| 40.000 | .0952 | .1849 | .2815 | .0621 | -.1205 | -.1228 | -.1667 | | -.1993 | -.1460 |
| 70.000 | -.0516 | -.0961 | -.1070 | -.1054 | .0000 | -.0464 | -.0680 | | | |
| 90.000 | -.0439 | -.0570 | -.0832 | -.0738 | .0085 | -.0253 | -.0673 | | | |
| 105.000 | | | .0000 | .0970 | .0397 | -.0578 | -.0998 | | | |
| 110.000 | | | | | | | | -.1429 | | |
| 120.000 | -.0998 | -.0882 | .0131 | .0809 | .0920 | -.0299 | -.0797 | -.1289 | | |
| 135.000 | | | .0342 | .0665 | .0558 | -.0533 | -.0899 | | | |
| 150.000 | -.0734 | -.0124 | .0493 | .0575 | -.0786 | -.0465 | -.0175 | | | |
| 165.000 | -.0747 | | .0501 | | .1111 | .0972 | -.0981 | | | |
| 180.000 | -.0821 | -.0718 | .0550 | .1121 | | | | | | |
| 320.000 | .0002 | .1285 | .5165 | .2887 | -.0699 | -.1229 | -.1777 | | | |

APC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB37)

ALPHAO( 7) = 6.130 BETAO ( 3) = -.154

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2277 | 1.0085 | .7374 | .4350 | .0261 | .0864 | | .0189 | | .0790 | .1352 | -.0494 | -.0857 | -.0241 | .0429 |
| 20.000 | | | .7524 | .4714 | .0305 | .0900 | | -.0598 | | .0077 | | | | | |
| 40.000 | | | .6760 | .5504 | .2128 | .1450 | | .1655 | | -.0693 | -.0550 | -.0530 | -.0703 | .0136 | -.0119 |
| 55.000 | | | .5740 | .4199 | .3131 | .2657 | | .1485 | | .0941 | | | | | |
| 70.000 | | | .5172 | .3717 | .2859 | .1973 | | .1661 | | .0843 | -.0659 | -.0821 | -.0952 | -.0781 | |
| 90.000 | | .5982 | .4884 | .3349 | .2578 | .1989 | | .1874 | | .1141 | -.0328 | -.0568 | -.1024 | -.1227 | |
| 120.000 | | | .4450 | .3174 | .2131 | .1867 | | .2932 | | .2136 | .0102 | -.1306 | -.1423 | -.1220 | |
| 140.000 | | | | | | | | | | .2003 | | | | | |
| 150.000 | | | .3763 | .2608 | .2125 | .1850 | | | | .0776 | -.1479 | -.1397 | -.1112 | -.0788 | |
| 151.000 | | | | | | | | | .5972 | | | | | | |
| 156.000 | | | | | | | | .6110 | | | | | | | |
| 162.000 | | | | | | | | | .7681 | | | | | | |
| 165.000 | | | | | | | | | | -.0064 | -.1605 | -.1165 | -.0876 | -.0735 | |
| 169.000 | | | | | | | | .7890 | | | | | | | |
| 174.000 | | | | | | | .5858 | | | | | | | | |
| 180.000 | 1.2277 | .5822 | .3176 | .2472 | .2135 | .1923 | | .8383 | | -.0871 | -.1608 | -.1024 | -.0768 | -.0711 | |
| 305.000 | | | .5433 | .3614 | .2466 | .3300 | | .1648 | | .0677 | | | | | |
| 320.000 | | | .6972 | .4504 | .1427 | .2069 | | .1000 | | -.0962 | .0489 | -.0961 | -.0614 | -.0434 | -.0226 |
| 340.000 | | | .7581 | .4013 | .0328 | .0738 | | -.0395 | | .0439 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1425 | .2622 | .3691 | .3132 | -.1458 | -.1608 | -.1097 | | -.0633 | -.0973 |
| 40.000 | .0292 | .2207 | .3366 | .1275 | -.1628 | -.1605 | -.1625 | | -.1443 | -.1195 |
| 70.000 | -.0684 | -.1049 | -.1180 | -.1069 | .0000 | -.0621 | -.0854 | | | |
| 90.000 | -.0554 | -.0524 | -.0889 | -.0007 | -.0015 | -.0477 | -.0924 | | | |
| 105.000 | | | .0000 | .0736 | .0022 | -.0821 | -.1171 | | | |
| 110.000 | | | | | | | | -.1508 | | |
| 120.000 | -.0648 | -.0480 | .0352 | .0719 | .0340 | -.0419 | -.0844 | -.1284 | | |
| 135.000 | | | .0505 | .0795 | .0407 | -.0089 | -.0299 | | | |
| 150.000 | -.0725 | -.0574 | .0495 | .0973 | .0427 | .0319 | .0028 | | | |
| 165.000 | -.0751 | | .0055 | | .2081 | .0963 | -.1004 | | | |
| 180.000 | -.0795 | -.0701 | -.0520 | .2299 | | | | | | |
| 320.000 | .0563 | .2221 | .5069 | .1997 | -.0791 | -.1369 | -.1719 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET837)

ALPHA0( 7) = 6.134 BETA0 ( 4) = 1.951

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3011 | .9806 | .7015 | .2884 | .0614 | .1949 | | -.0495 | | -.0555 | .1417 | -.0793 | -.0996 | -.0554 | .0785 |
| 20.000 | | | .6986 | .2924 | .0687 | .1055 | | -.0054 | | -.0654 | | | | | |
| 40.000 | | | .6467 | .3995 | .1206 | .1826 | | .0568 | | -.1053 | -.0172 | -.0562 | -.0747 | -.0105 | .0778 |
| 55.000 | | | .5135 | .3635 | .2283 | .1154 | | .1606 | | .0401 | | | | | |
| 70.000 | | | .4440 | .3040 | .2134 | .1485 | | .1590 | | .0807 | -.0856 | -.0945 | -.1012 | -.1166 | |
| 90.000 | | .5132 | .4192 | .2845 | .2048 | .1293 | | .1805 | | .1066 | -.0377 | -.0595 | -.1114 | -.1379 | |
| 120.000 | | | .3780 | .2739 | .1795 | .1488 | | .2628 | | .1834 | -.0036 | -.1382 | -.1402 | -.1133 | |
| 140.000 | | | | | | | | | | .1186 | | | | | |
| 150.000 | | | .3303 | .2432 | .1969 | .1604 | | | | .0337 | -.1523 | -.1304 | -.0950 | -.0742 | |
| 151.000 | | | | | | | | | .5643 | | | | | | |
| 156.000 | | | | | | | | .7116 | | | | | | | |
| 162.000 | | | | | | | | | .7077 | | | | | | |
| 165.000 | | | | | | | | | | -.0172 | -.1659 | -.1038 | -.0793 | -.0589 | |
| 169.000 | | | | | | | | .7789 | | | | | | | |
| 174.000 | | | | | | | .5833 | | | | | | | | |
| 180.000 | 1.3011 | .5589 | .3094 | .2392 | .2051 | .1810 | | .8312 | | -.0892 | -.1593 | -.1084 | -.0770 | -.0699 | |
| 305.000 | | | .5733 | .4118 | .4583 | .2882 | | .1871 | | .1024 | | | | | |
| 320.000 | | | .6932 | .5165 | .4409 | .1548 | | .1315 | | -.0654 | .0033 | -.1130 | -.0443 | -.0151 | -.0405 |
| 340.000 | | | .7275 | .3944 | .1286 | .2141 | | -.1037 | | .0248 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1193 | .2606 | .4030 | .3437 | -.1062 | -.1307 | -.1218 | | -.0785 | -.0841 |
| 40.000 | .0097 | .1286 | .4512 | .1566 | -.1431 | -.1310 | -.1679 | | -.1411 | -.1201 |
| 70.000 | -.0786 | -.1110 | -.1270 | -.0479 | .0000 | -.0788 | -.0908 | | | |
| 90.000 | -.0619 | -.0632 | -.0955 | .0165 | -.0235 | -.0734 | -.1035 | | | |
| 105.000 | | | .0000 | .0701 | -.0426 | -.0892 | -.1188 | | | |
| 110.000 | | | | | | | | -.1559 | | |
| 120.000 | -.0679 | -.0472 | .0400 | .0079 | .0297 | -.0487 | -.1081 | -.1429 | | |
| 135.000 | | | .0118 | .1268 | .0250 | -.0304 | -.0501 | | | |
| 150.000 | -.0969 | -.0703 | -.0056 | .1549 | .0542 | -.0050 | -.0127 | | | |
| 165.000 | -.0856 | | -.0405 | | .1907 | .0781 | -.1399 | | | |
| 180.000 | -.0795 | -.0740 | -.0080 | .1609 | | | | | | |
| 320.000 | .0447 | .2616 | .3813 | .1355 | -.1105 | -.1422 | -.1629 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET837)

ALPHAO( 7) = 6.135 BETAO ( 5) = 3.996

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2071 | .9750 | .7330 | .4181 | .0444 | .0643 | | .0060 | | -.0138 | .0717 | -.1137 | -.1214 | -.0414 | -.0654 |
| 20.000 | | | .7014 | .4040 | .0173 | .0553 | | .0010 | | -.0999 | | | | | |
| 40.000 | | | .5871 | .4326 | .0894 | .1040 | | .0285 | | -.1097 | .0066 | -.0502 | -.1253 | -.0172 | .0323 |
| 55.000 | | | .4693 | .3238 | .1702 | .0123 | | .1375 | | .0138 | | | | | |
| 70.000 | | | .4102 | .2851 | .1828 | .0487 | | .1558 | | .0665 | -.0882 | -.1120 | -.1086 | -.1444 | |
| 90.000 | | .4611 | .3741 | .2546 | .1785 | .0845 | | .1044 | | .1041 | -.0459 | -.0919 | -.1299 | -.1437 | |
| 120.000 | | | .3307 | .2450 | .1619 | .1321 | | .1778 | | .1170 | -.0221 | -.1637 | -.1430 | -.1126 | |
| 140.000 | | | | | | | | | | .0410 | | | | | |
| 150.000 | | | .2999 | .2275 | .1891 | .1490 | | | | .0155 | -.1725 | -.1309 | -.0991 | -.0798 | |
| 151.000 | | | | | | | | | .5003 | | | | | | |
| 156.000 | | | | | | | | .6166 | | | | | | | |
| 162.000 | | | | | | | | | .7365 | | | | | | |
| 165.000 | | | | | | | | | | -.0482 | -.1672 | -.1230 | -.0873 | -.0908 | |
| 169.000 | | | | | | | | .7976 | | | | | | | |
| 174.000 | | | | | | | .6380 | | | | | | | | |
| 180.000 | 1.2071 | .5711 | .3139 | .2374 | .2093 | .1818 | | .8482 | | -.0905 | -.1682 | -.1198 | -.1017 | -.0878 | |
| 305.000 | | | .6961 | .5768 | .4397 | .3573 | | .2148 | | .1190 | | | | | |
| 320.000 | | | .7938 | .6764 | .3228 | .1623 | | .1896 | | -.0172 | -.0423 | -.1040 | -.0650 | -.0109 | -.0095 |
| 340.000 | | | .7843 | .5027 | .1321 | .1311 | | -.0900 | | .0255 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1092 | .2192 | .3401 | .3408 | -.1443 | -.1219 | -.1284 | | -.0822 | -.0895 |
| 40.000 | .0062 | .1496 | .4946 | .1492 | -.1029 | -.1024 | -.1521 | | -.0905 | -.1013 |
| 70.000 | -.0865 | -.1155 | -.1259 | -.0366 | .0000 | -.0954 | -.1090 | | | |
| 90.000 | -.0748 | -.0758 | -.0947 | -.0162 | -.0629 | -.0740 | -.0910 | | | |
| 105.000 | | | .0000 | -.0014 | -.0991 | -.1155 | -.1299 | | | |
| 110.000 | | | | | | | | -.1615 | | |
| 120.000 | -.0975 | -.0604 | .0107 | .0279 | .0594 | -.0613 | -.1341 | -.1752 | | |
| 135.000 | | | .0701 | .1020 | .0520 | -.0556 | -.0830 | | | |
| 150.000 | -.1005 | -.0953 | .0523 | .0316 | -.0110 | -.0399 | -.0636 | | | |
| 165.000 | -.0975 | | .0472 | | .0443 | .0009 | -.1548 | | | |
| 180.000 | -.0878 | -.0437 | .0456 | .0554 | | | | | | |
| 320.000 | .0403 | .2281 | .3334 | .0550 | -.1494 | -.1488 | -.1772 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET838) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.500 RN/FT = 2.500
ELV-IB = 8.000 ELV-OB = -4.000
RUDDER = .000 SPDBRK = .000

ALPHAO( 1) = -6.289 BETAO ( 1) = -3.981

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.7562 | .8631 | .3137 | .1452 | .1837 | .6009 | | .0979 | | .1554 | .1938 | .0936 | .0954 | -.0117 | .0216 |
| 20.000 | | | .3965 | .1650 | .2063 | .5884 | | .0673 | | .1725 | | | | | |
| 40.000 | | | .5735 | .1908 | .1904 | .4901 | | .3888 | | .0869 | .1335 | .0587 | .1111 | -.0057 | .0590 |
| 55.000 | | | .6742 | .3842 | .2810 | .2711 | | .4364 | | .3130 | | | | | |
| 70.000 | | | .7101 | .4837 | .3426 | .2704 | | .3441 | | .3659 | .1278 | .1088 | .0908 | .0352 | |
| 90.000 | | .9756 | .7557 | .5318 | .3895 | .2679 | | .2885 | | .2455 | .1805 | .1205 | .0576 | .0363 | |
| 120.000 | | | .8098 | .6339 | .4778 | .4085 | | .4081 | | .3577 | .1335 | .0013 | .0303 | .0384 | |
| 140.000 | | | | | | | | | | .3582 | | | | | |
| 150.000 | | | .7634 | .5937 | .5234 | .4495 | | | | .2774 | -.0253 | -.0040 | .0209 | .0472 | |
| 151.000 | | | | | | | | | 1.0589 | | | | | | |
| 158.000 | | | | | | | | 1.1035 | | | | | | | |
| 162.000 | | | | | | | | | 1.3172 | | | | | | |
| 165.000 | | | | | | | | | | .1881 | -.0348 | -.0082 | .0135 | .0423 | |
| 169.000 | | | | | | | | 1.3740 | | | | | | | |
| 174.000 | | | | | | | 1.0565 | | | | | | | | |
| 180.000 | 1.7562 | 1.0558 | .6631 | .5489 | .5000 | .4495 | | 1.3821 | | .0664 | -.0493 | .0051 | .0198 | .0280 | |
| 305.000 | | | .4431 | .1795 | .1343 | .1629 | | .1907 | | .1338 | | | | | |
| 320.000 | | | .3857 | .0782 | .1460 | .1951 | | .1114 | | .0774 | .1737 | .0128 | -.0099 | -.0109 | -.0088 |
| 340.000 | | | .3514 | .1131 | .1509 | .5056 | | .0911 | | .0827 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9800 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0704 | .1853 | .4199 | .2979 | -.1059 | -.1782 | -.1794 | | -.1491 | -.1071 |
| 40.000 | -.0302 | .0669 | .2732 | -.0645 | -.1514 | -.1127 | -.1686 | | -.1879 | -.1744 |
| 70.000 | .0233 | .0041 | -.0058 | .0403 | .0000 | .0789 | .0476 | | | |
| 90.000 | .0241 | .0533 | .0242 | .1587 | .1089 | .0835 | .0440 | | | |
| 105.000 | | | .0000 | .2060 | .1111 | .0339 | .0012 | | | |
| 110.000 | | | | | | | | -.0416 | | |
| 120.000 | .0337 | .0357 | .0621 | .2648 | .2391 | .1083 | .0330 | -.0363 | | |
| 135.000 | | | .1097 | .2881 | .2234 | .1018 | .0612 | | | |
| 150.000 | .0330 | .0249 | .1011 | .2648 | .0921 | .1832 | .2060 | | | |
| 165.000 | .0308 | | .0535 | | .4118 | .3224 | .0059 | | | |
| 180.000 | .0201 | .0342 | .0349 | .3056 | | | | | | |
| 320.000 | .1083 | .0349 | .3541 | .0671 | -.0262 | -.1359 | -.1608 | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET838)

ALPHAO( 1) = -6.280 BETAO ( 2) = -1.881

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.7924 | .7851 | .3322 | .1311 | .1685 | .6301 | | .1103 | | .0695 | .2885 | .0414 | .0611 | -.0420 | -.0136 |
| 20.000 | | | .3897 | .1424 | .1777 | .5593 | | .1267 | | .1208 | | | | | |
| 40.000 | | | .5372 | .1678 | .1579 | .3562 | | .3193 | | .0549 | .1469 | .0411 | .0961 | -.0151 | .0358 |
| 55.000 | | | .6189 | .3401 | .2122 | .2052 | | .4358 | | .2792 | | | | | |
| 70.000 | | | .6321 | .4050 | .2855 | .1848 | | .2370 | | .3409 | .1233 | .0846 | .0702 | .0188 | |
| 90.000 | | .8908 | .6742 | .4610 | .3264 | .2193 | | .1899 | | .3040 | .1553 | .0974 | .0377 | .0198 | |
| 120.000 | | | .7378 | .5629 | .4201 | .3721 | | .4292 | | .3355 | .1001 | -.0598 | .0003 | .0380 | |
| 140.000 | | | | | | | | | | .3170 | | | | | |
| 150.000 | | | .7201 | .5597 | .4878 | .4345 | | | | .2495 | -.0359 | -.0165 | -.0029 | .0511 | |
| 151.000 | | | | | | | | | .9939 | | | | | | |
| 156.000 | | | | | | | | 1.0767 | | | | | | | |
| 162.000 | | | | | | | | | 1.2960 | | | | | | |
| 165.000 | | | | | | | | | | .1802 | -.0430 | -.0053 | .0129 | .0419 | |
| 169.000 | | | | | | | | 1.3897 | | | | | | | |
| 174.000 | | | | | | | 1.1051 | | | | | | | | |
| 180.000 | 1.7924 | 1.0428 | .6558 | .5377 | .4885 | .4508 | | 1.3991 | | .0671 | -.0454 | .0010 | .0241 | .0223 | |
| 305.000 | | | .5076 | .2228 | .1382 | .1678 | | .2621 | | .1911 | | | | | |
| 320.000 | | | .4152 | .1212 | .1618 | .2243 | | .1738 | | .0157 | .2052 | .0447 | .0038 | .0113 | .0244 |
| 340.000 | | | .3729 | .1132 | .1509 | .5405 | | .0946 | | .0845 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0607 | .2202 | .3993 | .2765 | -.1222 | -.1811 | -.1694 | | -.1152 | -.0797 |
| 40.000 | -.0222 | .0931 | .3154 | -.0357 | -.1559 | -.1358 | -.1766 | | -.1720 | -.1532 |
| 70.000 | .0152 | -.0072 | -.0111 | .0560 | .0000 | .0452 | .0327 | | | |
| 90.000 | .0195 | .0348 | .0092 | .1342 | .0829 | .0691 | .0374 | | | |
| 105.000 | | | .0000 | .1973 | .0677 | .0120 | -.0128 | | | |
| 110.000 | | | | | | | | -.0548 | | |
| 120.000 | .0309 | .0271 | .0371 | .2408 | .2012 | .0794 | .0100 | -.0509 | | |
| 135.000 | | | .1616 | .2775 | .2133 | .0815 | .0698 | | | |
| 150.000 | .0383 | .0382 | .1802 | .2809 | .1569 | .1991 | .1680 | | | |
| 165.000 | .0408 | | .0646 | | .3811 | .2905 | -.0142 | | | |
| 180.000 | .0485 | .0485 | .0389 | .3596 | | | | | | |
| 320.000 | .0732 | .0764 | .3807 | .0309 | -.0559 | -.1278 | -.1688 | | | |

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

ARC97-019 !A81 LVAP(ALLML SEALED) ORB. FUSELAGE (RET838)

ALPHA0( 1) = -6.268 BETA0 ( 3) = .215

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.7349 | .8570 | .3301 | .1397 | .1615 | .7013 | | .1396 | | .0452 | .2925 | .0345 | .0446 | -.0612 | -.0442 |
| 20.000 | | | .3710 | .1411 | .1629 | .5750 | | .1320 | | .0752 | | | | | |
| 40.000 | | | .4859 | .1404 | .1394 | .3866 | | .2525 | | .0225 | .1259 | .0542 | .0732 | -.0403 | .0219 |
| 55.000 | | | .5415 | .2885 | .1731 | .1663 | | .3595 | | .2445 | | | | | |
| 70.000 | | | .5527 | .3511 | .2410 | .1413 | | .1779 | | .1981 | .0879 | .0573 | .0516 | .0115 | |
| 90.000 | | .8167 | .5096 | .4043 | .2832 | .1765 | | .1330 | | .1811 | .1087 | .0760 | .0220 | .0182 | |
| 120.000 | | | .6753 | .5208 | .3884 | .3324 | | .3724 | | .2813 | .0746 | -.0999 | -.0226 | .0307 | |
| 140.000 | | | | | | | | | | .2472 | | | | | |
| 150.000 | | | .6859 | .5465 | .4834 | .4190 | | | | .2190 | -.0436 | -.0170 | -.0027 | .0428 | |
| 151.000 | | | | | | | | | .9556 | | | | | | |
| 156.000 | | | | | | | | 1.1113 | | | | | | | |
| 162.000 | | | | | | | | | 1.3825 | | | | | | |
| 165.000 | | | | | | | | | | .1572 | -.0450 | .0042 | .0210 | .0240 | |
| 169.000 | | | | | | | | 1.4328 | | | | | | | |
| 174.000 | | | | | | | 1.1310 | | | | | | | | |
| 180.000 | 1.7349 | 1.0342 | .6621 | .5493 | .5020 | .4510 | | 1.4398 | | .0619 | -.0481 | .0053 | .0311 | .0183 | |
| 305.000 | | | .5409 | .2685 | .1783 | .2103 | | .3417 | | .2271 | | | | | |
| 320.000 | | | .4485 | .1232 | .1762 | .3493 | | .2410 | | .0440 | .2106 | .0450 | .0129 | .0070 | .0496 |
| 340.000 | | | .3853 | .1200 | .1487 | .5159 | | .1330 | | .1167 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0794 | .1320 | .3705 | .3858 | -.0893 | -.1773 | -.1330 | | -.0784 | -.0859 |
| 40.000 | -.0183 | .1235 | .3027 | -.0332 | -.1537 | -.1534 | -.1337 | | -.1313 | -.1277 |
| 70.000 | .0070 | -.0104 | -.0245 | .0753 | .0000 | .0476 | .0379 | | | |
| 90.000 | .0123 | .0233 | -.0032 | .1174 | .0960 | .0568 | .0201 | | | |
| 105.000 | | | .0000 | .1899 | .0522 | .0134 | -.0175 | | | |
| 110.000 | | | | | | | | -.0641 | | |
| 120.000 | .0240 | .0182 | .1499 | .1619 | .1662 | .0553 | -.0119 | -.0662 | | |
| 135.000 | | | .0499 | .2688 | .1699 | .0578 | .0503 | | | |
| 150.000 | .0446 | .0396 | .0432 | .2853 | .2022 | .1455 | .1409 | | | |
| 165.000 | .0468 | | .0451 | | .3785 | .2599 | -.0655 | | | |
| 180.000 | .0548 | .0468 | .0453 | .3846 | | | | | | |
| 320.000 | .0453 | .1906 | .3952 | .0294 | -.0803 | -.1362 | -.1504 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RE7839)

ALPHA0( 1) = -6.259 BETA0 ( 4) = 2.322

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.7162 | .8427 | .3353 | .1328 | .1631 | .6157 | | .0920 | | .0789 | .2578 | .0258 | .0093 | -.0200 | -.0361 |
| 20.000 | | | .3544 | .1399 | .1666 | .4774 | | .1065 | | .0542 | | | | | |
| 40.000 | | | .4319 | .1216 | .1554 | .2659 | | .1768 | | .0517 | .0726 | .0792 | .0567 | .0347 | -.0002 |
| 55.000 | | | .4767 | .2391 | .1321 | .1283 | | .2462 | | .2228 | | | | | |
| 70.000 | | | .4894 | .2919 | .1891 | .1188 | | .1336 | | .1761 | .0761 | .0353 | .0319 | -.0022 | |
| 90.000 | | .7402 | .5325 | .3444 | .2282 | .1290 | | .0929 | | .1636 | -.0013 | .0542 | -.0084 | .0093 | |
| 120.000 | | | .6136 | .4714 | .3454 | .2905 | | .3664 | | .2379 | .0455 | -.1177 | -.0403 | .0197 | |
| 140.000 | | | | | | | | | | .2039 | | | | | |
| 150.000 | | | .6485 | .5309 | .4637 | .3947 | | | | .2331 | -.0555 | -.0221 | -.0033 | .0073 | |
| 151.000 | | | | | | | | | .9017 | | | | | | |
| 156.000 | | | | | | | | 1.2628 | | | | | | | |
| 162.000 | | | | | | | | | 1.2076 | | | | | | |
| 165.000 | | | | | | | | | | .1341 | -.0474 | .0005 | .0225 | .0023 | |
| 169.000 | | | | | | | | 1.3205 | | | | | | | |
| 174.000 | | | | | | | 1.0461 | | | | | | | | |
| 180.000 | 1.7162 | 1.0262 | .6562 | .5493 | .5050 | .4510 | | 1.4151 | | .0602 | -.0442 | .0100 | .0246 | .0276 | |
| 305.000 | | | .6127 | .3106 | .2240 | .2870 | | .4005 | | .2657 | | | | | |
| 320.000 | | | .4827 | .1444 | .2061 | .3570 | | .3026 | | .0761 | .2052 | .0581 | .0323 | -.0169 | .0098 |
| 340.000 | | | .4024 | .1223 | .1761 | .4503 | | .0876 | | .1545 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0080 | .1699 | .3866 | .3795 | -.1155 | -.1708 | -.1126 | | -.0774 | -.0781 |
| 40.000 | .0226 | .0927 | .3774 | .0399 | -.1491 | -.1238 | -.1414 | | -.0901 | -.0884 |
| 70.000 | .0080 | -.0179 | -.0325 | .0378 | .0000 | .0490 | .0289 | | | |
| 90.000 | .0016 | .0237 | -.0022 | .1170 | .0551 | .0241 | .0040 | | | |
| 105.000 | | | .0000 | .1708 | .0145 | -.0030 | -.0312 | | | |
| 110.000 | | | | | | | | -.0714 | | |
| 120.000 | .0176 | .0117 | .0631 | .1453 | .1491 | .0140 | -.0465 | -.0963 | | |
| 135.000 | | | .0349 | .2603 | .1541 | .0712 | .0269 | | | |
| 150.000 | .0400 | .0381 | .0339 | .2934 | .2147 | .1078 | .1057 | | | |
| 165.000 | .0400 | | .0336 | | .3305 | .2145 | -.0831 | | | |
| 180.000 | .0297 | .0453 | .0413 | .3515 | | | | | | |
| 320.000 | .0287 | .1615 | .3599 | -.0621 | -.1035 | -.1425 | -.1553 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB38)

ALPHA0( 1) = -6.250 BETA0 ( 5) = 4.369

SECTION : 1:ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.7019 | .8370 | .3257 | .1277 | .1784 | .6038 | | .0824 | | .1542 | .2140 | -.0474 | -.0175 | .0013 | -.0377 |
| 20.000 | | | .3331 | .1172 | .1467 | .4398 | | .0682 | | .0369 | | | | | |
| 40.000 | | | .3901 | .0993 | .1457 | .1946 | | .1117 | | .0042 | .0701 | .0701 | .0626 | -.0377 | -.0203 |
| 55.000 | | | .4169 | .1938 | .1063 | .0982 | | .1848 | | .1107 | | | | | |
| 70.000 | | | .4246 | .2402 | .1453 | .0922 | | .1068 | | .1128 | .0462 | .0238 | .0145 | -.0133 | |
| 90.000 | | .6701 | .4640 | .2947 | .1843 | .0922 | | .0529 | | .1267 | -.0376 | .0096 | -.0144 | .0002 | |
| 120.000 | | | .5619 | .4199 | .3008 | .2589 | | .3146 | | .2048 | .0178 | -.1258 | -.0548 | .0096 | |
| 140.000 | | | | | | | | | | .1876 | | | | | |
| 150.000 | | | .6105 | .5009 | .4331 | .3715 | | | | .1617 | -.0632 | -.0234 | -.0043 | -.0153 | |
| 151.000 | | | | | | | | | .7901 | | | | | | |
| 156.000 | | | | | | | | 1.0388 | | | | | | | |
| 162.000 | | | | | | | | | 1.2072 | | | | | | |
| 165.000 | | | | | | | | | | .0940 | -.0460 | -.0074 | .0183 | .0060 | |
| 169.000 | | | | | | | | 1.3131 | | | | | | | |
| 174.000 | | | | | | | 1.0862 | | | | | | | | |
| 180.000 | 1.7019 | 1.0049 | .6483 | .5367 | .4922 | .4496 | | 1.4031 | | .0669 | -.0446 | .0100 | .0218 | .0270 | |
| 305.000 | | | .6656 | .3622 | .2741 | .4303 | | .4372 | | .3132 | | | | | |
| 320.000 | | | .4950 | .1752 | .2048 | .3909 | | .3251 | | .1094 | .2020 | .0622 | .0479 | -.0068 | .0693 |
| 340.000 | | | .3977 | .1260 | .1830 | .3444 | | .0330 | | .1810 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0658 | .1073 | .3564 | .3910 | -.1334 | -.1665 | -.1194 | | -.0747 | -.0807 |
| 40.000 | .0512 | .1130 | .3721 | .1099 | -.1409 | -.1430 | -.1479 | | -.0874 | -.0849 |
| 70.000 | .0167 | -.0145 | -.0295 | .0254 | .0000 | .0389 | .0202 | | | |
| 90.000 | .0046 | .0238 | -.0020 | .1291 | .0571 | .0072 | -.0132 | | | |
| 105.000 | | | .0000 | .1437 | .0001 | -.0184 | -.0434 | | | |
| 110.000 | | | | | | | | -.0789 | | |
| 120.000 | .0043 | -.0010 | .1024 | .0963 | .1155 | -.0050 | -.0697 | -.1173 | | |
| 135.000 | | | .0176 | .2209 | .1244 | .0451 | .0085 | | | |
| 150.000 | .0181 | .0172 | .0151 | .2586 | .1970 | .0640 | .0525 | | | |
| 165.000 | .0142 | | .0211 | | .2558 | .1692 | -.0978 | | | |
| 180.000 | .0043 | .0122 | .0364 | .2722 | | | | | | |
| 320.000 | .0035 | .1597 | .3882 | -.0750 | -.1170 | -.1454 | -.1489 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET838)

ALPHAO( 2) = -4.232 BETAO ( 1) = -6.049

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0480 | .0700 | .1120 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3790 | .4870 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.0611 | .0422 | .2935 | .1484 | .3249 | .5117 | | .0668 | | .1561 | .0651 | .1403 | .0854 | -.0167 | .0298 |
| 20.000 | | | .3911 | .1770 | .2353 | .4165 | | .0405 | | .1892 | | | | | |
| 40.000 | | | .5912 | .2128 | .2803 | .5514 | | .3940 | | .1157 | .0370 | .0630 | .0589 | .0014 | .0792 |
| 55.000 | | | .7030 | .4233 | .3298 | .6036 | | .4121 | | .3257 | | | | | |
| 70.000 | | | .7394 | .4936 | .3738 | .3408 | | .4863 | | .3477 | .1136 | .1038 | .0874 | .0387 | |
| 90.000 | | .9818 | .7728 | .5534 | .4117 | .3281 | | .3921 | | .2265 | .1663 | .1205 | .0579 | .0310 | |
| 120.000 | | | .7957 | .6293 | .4735 | .4154 | | .4494 | | .4191 | .2112 | .0178 | .0045 | .0101 | |
| 140.000 | | | | | | | | | | .3926 | | | | | |
| 150.000 | | | .7242 | .5493 | .4820 | .4186 | | | | .2713 | -.0462 | -.0055 | -.0028 | .0188 | |
| 151.000 | | | | | | | | | 1.0575 | | | | | | |
| 156.000 | | | | | | | | 1.1745 | | | | | | | |
| 162.000 | | | | | | | | | 1.2451 | | | | | | |
| 165.000 | | | | | | | | | | .1515 | -.0494 | -.0195 | -.0010 | .0099 | |
| 169.000 | | | | | | | | 1.3118 | | | | | | | |
| 174.000 | | | | | | | 1.0325 | | | | | | | | |
| 180.000 | 1.0611 | .0763 | .5979 | .4810 | .4334 | .3936 | | 1.2573 | | .0430 | -.0747 | -.0219 | .0004 | -.0007 | |
| 305.000 | | | .3344 | .1246 | .1193 | .1510 | | .1217 | | .0462 | | | | | |
| 320.000 | | | .2984 | .1038 | .1397 | .1248 | | .0458 | | .0377 | .1315 | -.0223 | -.0487 | -.0203 | -.0494 |
| 340.000 | | | .3017 | .1299 | .3854 | .4119 | | .0513 | | .0356 | | | | | |

| X/LB | .0520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0003 | .1187 | .4112 | .3148 | -.0853 | -.1730 | -.1858 | | -.1572 | -.1171 |
| 40.000 | -.0526 | .0775 | .1580 | -.0878 | -.1455 | -.1053 | -.1248 | | -.1848 | -.1595 |
| 70.000 | .0102 | -.0100 | -.0150 | .0021 | .0000 | .0657 | .0497 | | | |
| 90.000 | .0110 | .0337 | .0092 | .1490 | .1174 | .0800 | .0465 | | | |
| 105.000 | | | .0000 | .1947 | .1302 | .0465 | .0064 | | | |
| 110.000 | | | | | | | | -.0427 | | |
| 120.000 | .0032 | .0140 | .0595 | .2182 | .2645 | .1130 | .0391 | -.0320 | | |
| 135.000 | | | .0795 | .2197 | .2279 | .0931 | .0440 | | | |
| 150.000 | .0021 | -.0047 | .0873 | .1726 | .0319 | .0942 | .1084 | | | |
| 165.000 | .0000 | | .0579 | | .3843 | .3369 | .0085 | | | |
| 180.000 | -.0249 | -.0238 | .0195 | .1819 | | | | | | |
| 320.000 | .1188 | .0224 | .3955 | .1356 | -.0226 | -.1440 | -.1681 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB38)

ALPHAO( 2) = -4.224 BETAO ( 2) = -3.999

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0480 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.6758 | .8241 | .2924 | .1368 | .1870 | .5735 | | .0717 | | .1396 | .1765 | .0866 | .0797 | -.0263 | -.0050 |
| 20.000 | | | .3763 | .1579 | .2087 | .4975 | | .0361 | | .1658 | | | | | |
| 40.000 | | | .5458 | .1800 | .2317 | .4592 | | .3484 | | .0800 | .0757 | .0469 | .0933 | -.0175 | .0508 |
| 55.000 | | | .6386 | .3653 | .2479 | .2778 | | .3954 | | .2846 | | | | | |
| 70.000 | | | .6664 | .4350 | .3214 | .2688 | | .4337 | | 3320 | .1017 | .0983 | .0648 | .0145 | |
| 90.000 | | .9211 | .7058 | .4872 | .3618 | .2459 | | .2853 | | .3243 | .1596 | .1017 | .0417 | .0138 | |
| 120.000 | | | .7494 | .5877 | .4382 | .3685 | | .3748 | | .3437 | .1249 | -.0078 | -.0012 | .0059 | |
| 140.000 | | | | | | | | | | .3300 | | | | | |
| 150.000 | | | .7035 | .5421 | .4855 | .3939 | | | | .2503 | -.0448 | -.0259 | -.0043 | .0220 | |
| 151.000 | | | | | | | | | .9901 | | | | | | |
| 156.000 | | | | | | | | 1.0308 | | | | | | | |
| 162.000 | | | | | | | | | 1.2418 | | | | | | |
| 165.000 | | | | | | | | | | .1544 | -.0518 | -.0315 | -.0019 | .0164 | |
| 169.000 | | | | | | | | 1.2780 | | | | | | | |
| 174.000 | | | | | | | .9804 | | | | | | | | |
| 180.000 | 1.6758 | .9860 | .6042 | .4888 | .4380 | .3915 | | 1.2835 | | .0465 | -.0659 | -.0189 | -.0039 | .0057 | |
| 305.000 | | | .4130 | .1582 | .1338 | .1541 | | .1755 | | .1301 | | | | | |
| 320.000 | | | .3650 | .0879 | .1245 | .1648 | | .1927 | | .0704 | .1544 | .0002 | -.0273 | -.0448 | -.0281 |
| 340.000 | | | .3288 | .1100 | .1549 | .4436 | | .0776 | | .0743 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0558 | .1546 | .4028 | .2798 | -.1068 | -.1785 | -.1781 | | -.1440 | -.1040 |
| 40.000 | -.0299 | .0800 | .2634 | 1690 | -.1490 | -.1130 | -.1624 | | -.1866 | -.1703 |
| 70.000 | -.0057 | -.0224 | -.0305 | .0105 | .0000 | .0439 | .0271 | | | |
| 90.000 | -.0028 | .0213 | -.0019 | .1289 | .0957 | .0504 | .0186 | | | |
| 105.000 | | | .0000 | .1642 | .0793 | .0190 | -.0180 | | | |
| 110.000 | | | | | | | | -.0557 | | |
| 120.000 | .0053 | .0095 | .0355 | .2166 | .2219 | .0830 | .0179 | -.0465 | | |
| 135.000 | | | .1004 | .2440 | .1955 | .0684 | .0403 | | | |
| 150.000 | .0075 | .0052 | .0947 | .2268 | .0543 | .1303 | .1680 | | | |
| 165.000 | .0057 | | .0401 | | .3621 | .2835 | -.0138 | | | |
| 180.000 | .0092 | .0187 | .0163 | .2683 | | | | | | |
| 320.000 | .1038 | .0384 | .3258 | .0796 | -.0285 | -.1308 | -.1535 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET838)

ALPHAO( 2) = -4.198 BETAO ( 3) = .210

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.6727 | .8214 | .3064 | .1236 | .1886 | .5370 | | .0906 | | .0421 | .2669 | .0322 | .0343 | -.0737 | -.0671 |
| 20.000 | | | .3435 | .1278 | .1673 | .3520 | | .1088 | | .0601 | | | | | |
| 40.000 | | | .4522 | .1236 | .1708 | .3216 | | .2571 | | .0183 | .1153 | .0367 | .0575 | -.0550 | .0094 |
| 55.000 | | | .5066 | .2626 | .1554 | .1538 | | .3476 | | .2197 | | | | | |
| 70.000 | | | .5190 | .3199 | .2183 | .1556 | | .1734 | | .2567 | .0797 | .0433 | .0350 | -.0100 | |
| 90.000 | | .7741 | .5597 | .3730 | .2588 | .1542 | | .1365 | | .2543 | .1079 | .0595 | .0108 | -.0083 | |
| 120.000 | | | .6211 | .4701 | .3446 | .2933 | | .3307 | | .2553 | .0573 | -.0871 | -.0307 | .0142 | |
| 140.000 | | | | | | | | | | .2208 | | | | | |
| 150.000 | | | .6176 | .4858 | .4184 | .3667 | | | | .1928 | -.0511 | -.0377 | -.0245 | .0260 | |
| 151.000 | | | | | | | | | .8669 | | | | | | |
| 156.000 | | | | | | | | 1.0107 | | | | | | | |
| 162.000 | | | | | | | | | 1.1796 | | | | | | |
| 165.000 | | | | | | | | | | .1300 | -.0604 | -.0211 | -.0034 | .0147 | |
| 169.000 | | | | | | | | 1.3131 | | | | | | | |
| 174.000 | | | | | | | 1.0369 | | | | | | | | |
| 180.000 | 1.6727 | .9538 | .5900 | .4816 | .4376 | .3992 | | 1.3172 | | .0451 | -.0607 | -.0186 | .0056 | .0091 | |
| 305.000 | | | .5145 | .2480 | .1797 | .3048 | | .3082 | | .2139 | | | | | |
| 320.000 | | | .4278 | .1096 | .2300 | .1814 | | .2650 | | .0364 | .2029 | .0236 | .0194 | -.0495 | .0355 |
| 340.000 | | | .3611 | .1208 | .3135 | .2594 | | .0919 | | .1306 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0553 | .1425 | .3365 | .3043 | -.0954 | -.1735 | -.1334 | | -.0762 | -.0800 |
| 40.000 | -.0280 | .1121 | .2912 | .0195 | -.1463 | -.1346 | -.1299 | | -.1142 | -.0987 |
| 70.000 | -.0213 | -.0339 | -.0424 | .0591 | .0000 | .0171 | .0015 | | | |
| 90.000 | -.0128 | -.0019 | -.0184 | .0732 | .0511 | .0390 | .0098 | | | |
| 105.000 | | | .0000 | .1313 | -.0034 | -.0193 | -.0349 | | | |
| 110.000 | | | | | | | | -.0734 | | |
| 120.000 | .0038 | .0028 | .1454 | .1901 | .1586 | .0527 | -.0176 | -.0691 | | |
| 135.000 | | | .1355 | .1989 | .1600 | .0573 | .0418 | | | |
| 150.000 | .0264 | .0212 | .0255 | .2513 | .1144 | .0990 | .1149 | | | |
| 165.000 | .0288 | | .0265 | | .3432 | .2198 | -.0790 | | | |
| 180.000 | .0370 | .0308 | .0234 | .3347 | | | | | | |
| 320.000 | .0267 | .1730 | .3633 | .0401 | -.0902 | -.1267 | -.1599 | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) OPB. FUSELAGE (RET838)

ALPHAO( 2) = -4.182 BETAO ( 4) = 4.367

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.6292 | .8084 | .3085 | .1189 | .1787 | .5529 | | .0604 | | .1410 | .1978 | -.0541 | -.0246 | -.0558 | -.0549 |
| 20.000 | | | .3155 | .0987 | .1305 | .4076 | | .0506 | | .0215 | | | | | |
| 40.000 | | | .3695 | .0854 | .1322 | .1694 | | .1029 | | -.0184 | .0654 | .0500 | .0357 | -.0565 | -.0262 |
| 55.000 | | | .3877 | .1724 | .1081 | .0898 | | .1673 | | .0967 | | | | | |
| 70.000 | | | .3852 | .2147 | .1249 | .0906 | | .0880 | | .0752 | .0385 | -.0006 | -.0035 | -.0347 | |
| 90.000 | | .6117 | .4157 | .2595 | .1581 | .0748 | | .0551 | | .1878 | -.0164 | .0225 | -.0322 | -.0218 | |
| 120.000 | | | .4992 | .3693 | .2590 | .2167 | | .2727 | | .1653 | .0018 | -.1349 | -.0624 | -.0035 | |
| 140.000 | | | | | | | | | | .1590 | | | | | |
| 150.000 | | | .5368 | .4371 | .3757 | .3186 | | | | .1349 | -.0789 | -.0478 | -.0267 | -.0249 | |
| 151.000 | | | | | | | | | .7128 | | | | | | |
| 156.000 | | | | | | | | .9520 | | | | | | | |
| 162.000 | | | | | | | | | 1.1283 | | | | | | |
| 165.000 | | | | | | | | | | .0609 | -.0660 | -.0291 | -.0052 | -.0138 | |
| 169.000 | | | | | | | | 1.2047 | | | | | | | |
| 174.000 | | | | | | | .9893 | | | | | | | | |
| 180.000 | 1.6292 | .9089 | .5744 | .4742 | .4297 | .3901 | | 1.2876 | | .0437 | -.0656 | -.0156 | .0021 | .0024 | |
| 305.000 | | | .6276 | .3413 | .2608 | .5446 | | .3849 | | .2918 | | | | | |
| 320.000 | | | .4798 | .1885 | .2167 | .3761 | | .3122 | | .1010 | .1793 | .0399 | .0319 | -.0354 | .0501 |
| 340.000 | | | .3850 | .1228 | .1610 | .2976 | | .0187 | | .1674 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0814 | .1194 | .3559 | .3581 | -.1416 | -.1735 | -.1253 | | -.0774 | -.0862 |
| 40.000 | .0455 | .1003 | .2985 | .1305 | -.1334 | -.1427 | -.1419 | | -.0827 | -.0781 |
| 70.000 | -.0174 | -.0354 | -.0471 | .0199 | .0000 | .0189 | -.0007 | | | |
| 90.000 | -.0227 | -.0004 | -.0237 | .0873 | .0263 | -.0109 | -.0216 | | | |
| 105.000 | | | .0000 | .1071 | -.0346 | -.0378 | -.0565 | | | |
| 110.000 | | | | | | | | -.0893 | | |
| 120.000 | -.0131 | -.0226 | .0362 | .0826 | .0957 | -.0142 | -.0777 | -.1197 | | |
| 135.000 | | | -.0006 | .1889 | .1014 | .0254 | -.0099 | | | |
| 150.000 | .0063 | .0026 | .0022 | .2168 | .1680 | .0399 | .0317 | | | |
| 165.000 | .0045 | | .0072 | | .2129 | .1334 | -.1063 | | | |
| 180.000 | -.0117 | .0008 | .0316 | .2360 | | | | | | |
| 320.000 | -.0071 | .1397 | .3652 | -.0718 | -.1193 | -.1373 | -.1303 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB38)

ALPHAO( 2) = -4.175 BETAO ( 5) = 6.419

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.6605 | .8245 | .3055 | .1327 | .2910 | .5321 | | .0610 | | .1247 | .1482 | -.0708 | -.0707 | -.0214 | -.0862 |
| 20.000 | | | .2894 | .1072 | .1387 | .3478 | | .0362 | | .0137 | | | | | |
| 40.000 | | | .3167 | .0935 | .1184 | .1224 | | .0511 | | .0019 | .0007 | .0480 | -.0325 | -.0752 | -.0430 |
| 55.000 | | | .3318 | .1296 | .1008 | .0635 | | .1222 | | .0511 | | | | | |
| 70.000 | | | .3311 | .1705 | .0861 | .0635 | | .0654 | | .0432 | -.0239 | -.0116 | -.0190 | -.0436 | |
| 90.000 | | .5634 | .3672 | .2146 | .1198 | .0428 | | .0241 | | .1104 | -.0386 | -.0429 | -.0339 | -.0301 | |
| 120.000 | | | .4509 | .3277 | .2223 | .1809 | | .2391 | | .1373 | -.0253 | -.1435 | -.1029 | -.0103 | |
| 140.000 | | | | | | | | | | .1152 | | | | | |
| 150.000 | | | .5036 | .4170 | .3531 | .2963 | | | | .1037 | -.0869 | -.0488 | -.0287 | -.0342 | |
| 151.000 | | | | | | | | | .6707 | | | | | | |
| .56.000 | | | | | | | | .9125 | | | | | | | |
| 162.000 | | | | | | | | | 1.1028 | | | | | | |
| 165.000 | | | | | | | | | | .0189 | -.0775 | -.0325 | -.0117 | -.0172 | |
| 169.000 | | | | | | | | 1.2398 | | | | | | | |
| 174.000 | | | | | | | 1.0510 | | | | | | | | |
| 180.000 | 1.6605 | .8957 | .5724 | .4664 | .4207 | .3946 | | 1.2523 | | .0431 | -.0666 | -.0256 | -.0051 | -.0031 | |
| 305.000 | | | .6843 | .3872 | .3054 | .6579 | | .3920 | | .3181 | | | | | |
| 320.000 | | | .5113 | .2125 | .2889 | .4537 | | .3632 | | .1401 | .0977 | .0441 | .0629 | -.0031 | .0705 |
| 340.000 | | | .3960 | .1310 | .2879 | .2391 | | .0401 | | .1594 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0979 | -.0324 | .3496 | .3219 | -.1518 | -.1802 | -.1290 | | -.0796 | -.0885 |
| 40.000 | .0755 | .1445 | .3067 | .1910 | -.1192 | -.1741 | -.1506 | | -.0814 | -.0768 |
| 70.000 | -.0048 | -.0303 | -.0412 | -.0231 | .0000 | .0071 | -.0094 | | | |
| 90.000 | -.0144 | -.0020 | -.0227 | .1015 | .0192 | -.0230 | -.0413 | | | |
| 105.000 | | | .0000 | .1008 | -.0248 | -.0493 | -.0664 | | | |
| 110.000 | | | | | | | | -.1000 | | |
| 120.000 | -.0204 | -.0206 | .0866 | .0365 | .0553 | -.0360 | -.0986 | -.1404 | | |
| 135.000 | | | .0522 | .1369 | .0766 | .0040 | -.0321 | | | |
| 150.000 | -.0306 | -.0206 | .0224 | .1699 | .1479 | .0132 | -.0073 | | | |
| 165.000 | -.0363 | | .0280 | | .1529 | .0942 | -.1170 | | | |
| 180.000 | -.0285 | -.0362 | .0224 | .1493 | | | | | | |
| 320.000 | .0005 | .1544 | .2825 | -.0808 | -.1273 | -.1499 | -.1347 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET838)

ALPHAO( 3) = -2.171 BETAO ( 1) = -6.052

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5591 | .8133 | .2760 | .1778 | .4995 | .4424 | | .0423 | | .1330 | .0481 | .1174 | .0668 | -.0333 | .0046 |
| 20.000 | | | .3740 | .1799 | .4204 | .3272 | | .0306 | | .1590 | | | | | |
| 40.000 | | | .5722 | .2041 | .3033 | .5516 | | .3718 | | .1105 | .0271 | .0365 | -.0069 | -.0093 | .0659 |
| 55.000 | | | .6759 | .4064 | .3205 | .6374 | | .3822 | | .2972 | | | | | |
| 70.000 | | | .6963 | .4656 | .3499 | .3251 | | .4378 | | .3079 | .0901 | .0792 | .0647 | .0227 | |
| 90.000 | | .9205 | .7199 | .5145 | .3911 | .3338 | | .3974 | | .1729 | .1359 | .1029 | .0494 | .0109 | |
| 120.000 | | | .7292 | .5735 | .4245 | .3690 | | .4117 | | .4195 | .2045 | .0109 | -.0162 | -.0211 | |
| 140.000 | | | | | | | | | | .3547 | | | | | |
| 150.000 | | | .6552 | .4867 | .4220 | .3585 | | | | .2431 | -.0524 | -.0280 | -.0253 | -.0099 | |
| 151.000 | | | | | | | | | .9680 | | | | | | |
| 156.000 | | | | | | | | 1.0685 | | | | | | | |
| 162.000 | | | | | | | | | 1.1526 | | | | | | |
| 165.000 | | | | | | | | | | .1209 | -.0636 | -.0353 | -.0291 | -.0156 | |
| 169.000 | | | | | | | | 1.1997 | | | | | | | |
| 174.000 | | | | | | | .9438 | | | | | | | | |
| 180.000 | 1.5591 | .8838 | .5306 | .4183 | .3735 | .3402 | | 1.1557 | | .0225 | -.0895 | -.0458 | -.0221 | -.0234 | |
| 305.000 | | | .3014 | .1066 | .1283 | .1557 | | .1066 | | .0456 | | | | | |
| 320.000 | | | .2752 | .1294 | .2920 | .0862 | | .0466 | | .0292 | .1160 | -.0333 | -.0645 | -.0485 | -.0407 |
| 340.000 | | | .2826 | .1354 | .4596 | .3423 | | .0372 | | .0309 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | 0538 | .1307 | .4028 | .3062 | -.0846 | -.1716 | -.1739 | | -.1383 | -.0957 |
| 40.000 | -.0489 | .0857 | .1588 | -.1029 | -.1385 | -.0981 | -.1067 | | -.1676 | -.1669 |
| 70.000 | -.0121 | -.0289 | -.0329 | -.0201 | .0000 | .0496 | .0285 | | | |
| 90.000 | -.0096 | .0106 | -.0113 | .0697 | .0968 | .0716 | .0321 | | | |
| 105.000 | | | .0000 | .1759 | .1238 | .0354 | -.0079 | | | |
| 110.000 | | | | | | | | -.0564 | | |
| 120.000 | -.0301 | -.0134 | -.0017 | .1926 | .2211 | .0880 | .0193 | -.0454 | | |
| 135.000 | | | .0995 | .1717 | .1958 | .0661 | .0232 | | | |
| 150.000 | -.0234 | -.0272 | .1336 | .1259 | .0137 | .0491 | .0381 | | | |
| 165.000 | -.0249 | | .1290 | | .2956 | .2845 | -.0047 | | | |
| 180.000 | -.0415 | -.0301 | .1116 | .1330 | | | | | | |
| 320.000 | .1321 | .0150 | .4131 | .1355 | -.0232 | -.1375 | -.1449 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB38)

ALPHAO( 3) = -2.155 BETAO ( 2) = -1.900

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.6219 | .7075 | .2834 | .1413 | .3052 | .4880 | | .0544 | | .0402 | .2438 | .0213 | .0363 | -.0571 | -.0585 |
| 20.000 | | | .3365 | .1364 | .2420 | .4177 | | .0819 | | .0940 | | | | | |
| 40.000 | | | .4719 | .1402 | .2090 | .3470 | | .2931 | | .0419 | .0889 | .0199 | .0718 | -.0427 | .0114 |
| 55.000 | | | .5321 | .2880 | .1813 | .3294 | | .3352 | | .2292 | | | | | |
| 70.000 | | | .5331 | .3375 | .2329 | .1983 | | .3213 | | .2688 | .0648 | .0434 | .0231 | -.0218 | |
| 90.000 | | .7765 | .5664 | .3838 | .2652 | .1779 | | .2156 | | .2594 | .1128 | .0619 | .0032 | -.0274 | |
| 120.000 | | | .6111 | .4614 | .3400 | .2879 | | .3001 | | .2557 | .0669 | -.0379 | -.0281 | -.0239 | |
| 140.000 | | | | | | | | | | .2501 | | | | | |
| 150.000 | | | .5834 | .4372 | .3738 | .3228 | | | | .1923 | -.0757 | -.0577 | -.0264 | .0047 | |
| 151.000 | | | | | | | | | .8399 | | | | | | |
| 156.000 | | | | | | | | .8978 | | | | | | | |
| 162.000 | | | | | | | | | 1.1245 | | | | | | |
| 165.000 | | | | | | | | | | .1093 | -.0771 | -.0553 | -.0316 | -.0017 | |
| 169.000 | | | | | | | | 1.1661 | | | | | | | |
| 174.000 | | | | | | | .8889 | | | | | | | | |
| 180.000 | 1.8219 | .8839 | .5210 | .4101 | .3618 | .3328 | | 1.1917 | | .0234 | -.0849 | -.0441 | -.0236 | -.0070 | |
| 305.000 | | | .4307 | .1813 | .1568 | .2795 | | .2219 | | .1495 | | | | | |
| 320.000 | | | .3547 | .1248 | .1521 | .1986 | | .1524 | | .0045 | .1765 | .0032 | -.0212 | -.0709 | -.0049 |
| 340.000 | | | .3189 | .1350 | .3101 | .3607 | | .0652 | | 0819 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0263 | .1896 | .3742 | .2874 | -.1271 | -.1772 | -.1530 | | -.0763 | -.0763 |
| 40.000 | -.0329 | .1261 | .2607 | -.0179 | -.1459 | -.1338 | -.1416 | | -.1463 | -.1184 |
| 70.000 | -.0425 | -.0567 | -.0603 | .0237 | .0000 | .0027 | -.0136 | | | |
| 90.000 | -.0351 | -.0258 | -.0283 | .0895 | .0347 | .0063 | -.0115 | | | |
| 105.000 | | | .0000 | .0988 | .0237 | -.0193 | -.0448 | | | |
| 110.000 | | | | | | | | -.0813 | | |
| 120.000 | -.0209 | -.0165 | .0312 | .1488 | .1762 | .0552 | -.0158 | -.0721 | | |
| 135.000 | | | .0468 | .2018 | .1606 | .0392 | .0123 | | | |
| 150.000 | -.0028 | .0009 | .0265 | .2015 | .0635 | .0959 | .1108 | | | |
| 165.000 | .0008 | | .0013 | | .2875 | .2140 | -.0420 | | | |
| 180.000 | .0107 | .0105 | .0006 | .2790 | | | | | | |
| 320.000 | .0416 | .1247 | .4436 | .0475 | -.0745 | -.1164 | -.1586 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB38)

ALPHAO( 3) = -2.141 BETAO ( 3) = 2.289

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4870 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5818 | .7971 | .2858 | .1656 | .4149 | .3949 | | .0382 | | .0536 | .2338 | -.0052 | -.0035 | -.1124 | -.0986 |
| 20.000 | | | .3030 | .1579 | .4237 | .3092 | | .0480 | | .0386 | | | | | |
| 40.000 | | | .3712 | .1586 | .2173 | .1697 | | .1334 | | -.0041 | .0670 | .0505 | .0222 | -.0714 | -.0244 |
| 55.000 | | | .4046 | .1878 | .1660 | .2120 | | .1813 | | .1560 | | | | | |
| 7 .000 | | | .4145 | .2362 | .1439 | .1161 | | .1299 | | .1744 | .0323 | .0021 | -.0046 | -.0432 | |
| 90.000 | | .6578 | .4465 | .2840 | .1783 | .1007 | | .1060 | | .2293 | .0291 | .0205 | -.0205 | -.0383 | |
| 120.000 | | | .5115 | .3791 | .2597 | .2127 | | .2487 | | .1672 | .0098 | -.1274 | -.0745 | -.0135 | |
| 140.000 | | | | | | | | | | .1479 | | | | | |
| 150.000 | | | .5160 | .4047 | .3454 | .2896 | | | | .1462 | -.0876 | -.0661 | -.0484 | -.0003 | |
| 151.000 | | | | | | | | | .7457 | | | | | | |
| 155.000 | | | | | | | | 1.0831 | | | | | | | |
| 162.000 | | | | | | | | | 1.0364 | | | | | | |
| 165.000 | | | | | | | | | | .0764 | -.0873 | -.0491 | -.0279 | -.0124 | |
| 169.000 | | | | | | | | 1.1195 | | | | | | | |
| 174.000 | | | | | | | .8908 | | | | | | | | |
| 180.000 | 1.5818 | .9484 | .5188 | .4205 | .3781 | .3380 | | 1.1936 | | .0246 | -.0873 | -.0397 | -.0247 | -.0099 | |
| 305.000 | | | .5618 | .2790 | .2155 | .4265 | | .3300 | | .2219 | | | | | |
| 320.000 | | | .4399 | .1512 | .2138 | .2994 | | .2588 | | .0503 | .1588 | .0125 | .0003 | -.0695 | -.0110 |
| 340.000 | | | .3510 | .1646 | .3963 | .3700 | | .0226 | | .1210 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0631 | .1778 | .3128 | .3463 | -.1143 | -.1623 | -.1136 | | -.0812 | -.0837 |
| 40.000 | -.0046 | .0902 | .3726 | .0508 | -.1442 | -.1179 | -.1370 | | -.0809 | -.0794 |
| 70.000 | -.0535 | -.0649 | -.0695 | .0081 | .0000 | -.0088 | -.0207 | | | |
| 90.000 | - .482 | -.0358 | -.0485 | .0455 | .0143 | -.0021 | -.0229 | | | |
| 105.000 | | | .0000 | .1192 | -.0234 | -.0415 | -.0594 | | | |
| 110.000 | | | | | | | | -.0977 | | |
| 120.000 | -.0177 | -.0214 | .0085 | .0644 | .0655 | -.0073 | -.0612 | -.1012 | | |
| 135.000 | | | -.0132 | .1852 | .1102 | -.0005 | -.0161 | | | |
| 150.000 | .0015 | -.0011 | -.0058 | .2168 | .1603 | .0338 | .0455 | | | |
| 165.000 | .0018 | | -.0009 | | .2485 | .1455 | -.1026 | | | |
| 180.000 | -.0024 | .0035 | .0006 | .2598 | | | | | | |
| 320.000 | .0125 | .1306 | .3071 | -.0589 | -.1072 | -.1324 | -.1427 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET838)

ALPHAO( 3) = -2.131 BETAO ( 4) = 6.395

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5452 | .8313 | .2808 | .1405 | .5071 | .4050 | | .0449 | | .1192 | .1299 | -.0760 | -.0794 | -.0380 | -.0670 |
| 20.000 | | | .2608 | .1303 | .4581 | .2780 | | .0326 | | .0041 | | | | | |
| 40.000 | | | .2864 | .1103 | .1528 | .0998 | | .0462 | | -.0268 | .0054 | .0254 | -.0220 | -.0915 | -.0490 |
| 55.000 | | | .2998 | .1022 | .0949 | .1051 | | .0990 | | .0250 | | | | | |
| 70.000 | | | .2994 | .1419 | .0685 | .0526 | | .0743 | | .0657 | -.0441 | -.0300 | -.0334 | -.0658 | |
| 90.000 | | .5194 | .3275 | .1830 | .0935 | .0428 | | .0448 | | .1518 | -.0423 | -.0567 | -.0505 | -.0474 | |
| 120.000 | | | .3949 | .2811 | .1827 | .1427 | | .1974 | | .1078 | -.0402 | -.1541 | -.0936 | -.0220 | |
| 140.000 | | | | | | | | | | .0378 | | | | | |
| 150.000 | | | .4378 | .3569 | .3016 | .2460 | | | | .0836 | -.1044 | -.0752 | -.0477 | -.0511 | |
| 151.000 | | | | | | | | | .6190 | | | | | | |
| 156.000 | | | | | | | | .8756 | | | | | | | |
| 162.000 | | | | | | | | | 1.0237 | | | | | | |
| 165.000 | | | | | | | | | | -.0030 | -.0963 | -.0554 | -.0345 | -.0419 | |
| 169.000 | | | | | | | | 1.1385 | | | | | | | |
| 174.000 | | | | | | | .9180 | | | | | | | | |
| 180.000 | 1.5452 | .8150 | .5056 | .4054 | .3645 | .3262 | | 1.1415 | | .0215 | -.0847 | -.0501 | -.0314 | -.0299 | |
| 305.000 | | | .6596 | .3658 | .3470 | .5954 | | .3646 | | .2963 | | | | | |
| 320.000 | | | .5120 | .1988 | .3238 | .4169 | | .3277 | | .1450 | .0605 | .0267 | .0386 | -.0249 | .0627 |
| 340.000 | | | .3780 | .1774 | .5557 | .1933 | | .0288 | | .1219 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.1065 | -.0040 | .3336 | .3016 | -.1309 | -.1619 | -.1097 | | -.0654 | -.0813 |
| 40.000 | .0702 | .1454 | .3041 | .1960 | -.1207 | -.1363 | -.1157 | | -.0672 | -.0739 |
| 70.000 | -.0352 | -.0522 | -.0625 | -.0206 | .0000 | -.0165 | -.0341 | | | |
| 90.000 | -.0433 | -.0249 | -.0447 | .0655 | -.0087 | -.0453 | -.0555 | | | |
| 105.000 | | | .0000 | .0655 | -.0620 | -.0795 | -.0863 | | | |
| 110.000 | | | | | | | | -.1150 | | |
| 120.000 | -.0412 | -.0501 | .0655 | .0240 | .0425 | -.0444 | -.1075 | -.1473 | | |
| 135.000 | | | .0491 | .1054 | .0546 | -.0167 | -.0497 | | | |
| 150.000 | -.0362 | -.0351 | .0484 | .1346 | .1245 | -.0075 | -.0331 | | | |
| 165.000 | -.0430 | | .0583 | | .1140 | .0592 | -.1260 | | | |
| 180.000 | -.0533 | -.0572 | .0659 | .1090 | | | | | | |
| 320.000 | .0074 | .0975 | .2675 | -.0706 | -.1314 | -.1508 | -.0976 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB38)

ALPHAO( 4) = -.107 BETAO ( 1) = -6.062

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1860 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4997 | .7044 | .2561 | .2042 | .4364 | .3286 | | .0301 | | .1168 | .0340 | .0982 | .0534 | -.0460 | -.0069 |
| 20.000 | | | .3534 | .2379 | .5592 | .2082 | | .0269 | | .1557 | | | | | |
| 40.000 | | | .5534 | .2235 | .4199 | .4623 | | .3564 | | .1012 | .0162 | .0260 | -.0397 | -.0064 | .0445 |
| 55.000 | | | .6486 | .3887 | .3575 | .5685 | | .3543 | | .2678 | | | | | |
| 70.000 | | | .6684 | .4431 | .3347 | .3447 | | .3967 | | .2755 | .0638 | .0558 | .0426 | .0075 | |
| 90.000 | | .8855 | .6840 | .4894 | .3613 | .3310 | | .4321 | | .1661 | .1006 | .0791 | .0315 | -.0067 | |
| 120.000 | | | .6756 | .5244 | .3830 | .3310 | | .3730 | | .4091 | .1883 | .0016 | -.0377 | -.0536 | |
| 140.000 | | | | | | | | | | .3537 | | | | | |
| 150.000 | | | .5919 | .4280 | .3668 | .3187 | | | | .2160 | -.0637 | -.0512 | -.0457 | -.0370 | |
| 151.000 | | | | | | | | | .8947 | | | | | | |
| 156.000 | | | | | | | | .9619 | | | | | | | |
| 162.000 | | | | | | | | | 1.0710 | | | | | | |
| 165.000 | | | | | | | | | | .0922 | -.0771 | -.0491 | -.0557 | -.0420 | |
| 169.000 | | | | | | | | 1.0956 | | | | | | | |
| 174.000 | | | | | | | .8458 | | | | | | | | |
| 180.000 | 1.4997 | .8051 | .4686 | .3606 | .3198 | .2900 | | 1.0551 | | .0039 | -.1041 | -.0537 | -.0453 | -.0459 | |
| 305.000 | | | .2727 | .1197 | .1193 | .1070 | | .0841 | | .0302 | | | | | |
| 320.000 | | | .2523 | .1565 | .3647 | .0428 | | .0519 | | .0162 | .0982 | -.0359 | -.0853 | -.0704 | -.0455 |
| 340.000 | | | .2617 | .2144 | .3742 | .2468 | | .0345 | | .0242 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0190 | .1278 | .3801 | .2852 | -.0836 | -.1709 | -.1700 | | -.1258 | -.0961 |
| 40.000 | -.0452 | .0516 | .1574 | -.0959 | -.1255 | -.0999 | -.0945 | | -.1410 | -.1435 |
| 70.000 | -.0158 | -.0420 | -.0489 | -.0365 | .0000 | .0300 | .0110 | | | |
| 90.000 | -.0214 | -.0041 | -.0294 | .0034 | .0790 | .0570 | .0167 | | | |
| 105.000 | | | .0000 | .1375 | .1188 | .0190 | -.0148 | | | |
| 110.000 | | | | | | | | -.0634 | | |
| 120.000 | -.0611 | -.0404 | -.0390 | .1500 | .1866 | .0603 | .0050 | -.0495 | | |
| 135.000 | | | .0631 | .1287 | .1653 | .0468 | .0004 | | | |
| 150.000 | -.0487 | -.0507 | .1126 | .0836 | -.0136 | .0022 | -.0254 | | | |
| 165.000 | -.0505 | | .1094 | | .2615 | .2467 | -.0198 | | | |
| 180.000 | -.0530 | -.0432 | .1008 | .0907 | | | | | | |
| 320.000 | .0906 | .0155 | .3979 | .1319 | -.0193 | -.1254 | -.1371 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET838)

ALPHAO( 4) = -.104 BETAO ( 2) = -4.014

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4805 | .7721 | .2615 | .2606 | .4311 | .3114 | | .0414 | | .0938 | .1502 | .0530 | .0497 | -.0559 | -.0448 |
| 20.000 | | | .3426 | .2500 | .5258 | .2531 | | .0072 | | .1400 | | | | | |
| 40.000 | | | .5070 | .2325 | .4802 | .3406 | | .3089 | | .0778 | .0158 | .0046 | .0396 | -.0330 | .0172 |
| 55.000 | | | .5080 | .3385 | .3206 | .4166 | | .3034 | | .2287 | | | | | |
| 70.000 | | | .5984 | .3932 | .2858 | .2591 | | .3347 | | .2453 | .0530 | .0397 | .0226 | -.0174 | |
| 90.000 | | .8091 | .6153 | .4339 | .3083 | .2562 | | .2940 | | .2439 | .0937 | .0628 | .0139 | -.0295 | |
| 120.000 | | | .6364 | .4852 | .3459 | .2816 | | .3263 | | .3395 | .1520 | -.0209 | -.0452 | -.0486 | |
| 140.000 | | | | | | | | | | .2798 | | | | | |
| 150.000 | | | .5731 | .4188 | .3522 | .2921 | | | | .2022 | -.0793 | -.0497 | -.0511 | -.0246 | |
| 151.000 | | | | | | | | | .8330 | | | | | | |
| 156.000 | | | | | | | | .8500 | | | | | | | |
| 162.000 | | | | | | | | | 1.0695 | | | | | | |
| 165.000 | | | | | | | | | | .0927 | -.0857 | -.0629 | -.0410 | -.0303 | |
| 169.000 | | | | | | | | 1.0567 | | | | | | | |
| 174.000 | | | | | | | .7647 | | | | | | | | |
| 180.000 | 1.4805 | .8115 | .4792 | .3732 | .3241 | .2840 | | 1.0674 | | .0070 | -.1029 | -.0515 | -.0358 | -.0349 | |
| 305.000 | | | .3707 | .1504 | .1562 | .1726 | | .1084 | | .0948 | | | | | |
| 320.000 | | | .3248 | .1851 | .3899 | .0797 | | .0934 | | .0411 | .1271 | -.0174 | -.0549 | -.0987 | -.0494 |
| 340.000 | | | .2921 | .2234 | .4212 | .2415 | | .0476 | | .0175 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0410 | .1207 | .3784 | .2464 | -.1019 | -.1747 | -.1686 | | -.1123 | -.0770 |
| 40.000 | -.0105 | .0796 | .2282 | -.0571 | -.1239 | -.1093 | -.1271 | | -.1587 | -.1495 |
| 70.000 | -.0413 | -.0559 | -.0621 | -.0443 | .0000 | .0048 | -.0101 | | | |
| 90.000 | -.0424 | -.0197 | -.0393 | .0656 | .0500 | .0293 | -.0030 | | | |
| 105.000 | | | .0000 | .1240 | .0770 | -.0030 | -.0402 | | | |
| 110.000 | | | | | | | | -.0835 | | |
| 120.000 | -.0494 | -.0358 | .0767 | .1427 | .1662 | .0466 | -.0133 | -.0651 | | |
| 135.000 | | | .1240 | .1495 | .1506 | .0363 | -.0002 | | | |
| 150.000 | -.0377 | - 0294 | .1343 | .1459 | .0258 | .0795 | .0849 | | | |
| 165.000 | -.0353 | | .1123 | | .2387 | .2083 | -.0314 | | | |
| 180.000 | -.0190 | -.0173 | .0560 | .1918 | | | | | | |
| 320.000 | .0842 | .0037 | .3314 | .0940 | -.0351 | -.1133 | -.1434 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RE*838)

ALPHA0( 4) = -.095 BETA0 ( 3) = .177

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| K/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5240 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5075 | .7491 | .2561 | .4110 | .4366 | .1509 | | .0334 | | .0263 | .2237 | .0255 | -.0059 | -.1047 | -.1000 |
| 20.000 | | | .2909 | .2293 | .4261 | .0714 | | .0831 | | .0326 | | | | | |
| 40.000 | | | .3863 | .2187 | .3590 | .1787 | | .2463 | | .0127 | .0817 | .0227 | .0279 | -.0852 | -.0229 |
| 55.000 | | | .4317 | .2173 | .2142 | .2399 | | .2665 | | .1652 | | | | | |
| 70.000 | | | .4352 | .2591 | .1730 | .1460 | | .2000 | | .1917 | .0199 | .0041 | -.0083 | -.0497 | |
| 90.000 | | .8678 | .4868 | .3013 | .1980 | .1368 | | .1499 | | .2458 | .0831 | .0233 | -.0238 | -.0553 | |
| 120.000 | | | .5157 | .3779 | .2800 | .2153 | | .2415 | | .1991 | .0230 | -.0540 | -.0504 | -.0435 | |
| 140.000 | | | | | | | | | | .1780 | | | | | |
| 150.000 | | | .5028 | .3737 | .3159 | .2635 | | | | .1358 | -.1000 | -.0779 | -.0560 | -.0112 | |
| 151.000 | | | | | | | | | .7108 | | | | | | |
| 158.000 | | | | | | | | .8047 | | | | | | | |
| 162.000 | | | | | | | | | 1.0256 | | | | | | |
| 165.000 | | | | | | | | | | .0613 | -.0986 | -.0685 | -.0487 | -.0130 | |
| 169.000 | | | | | | | | 1.1051 | | | | | | | |
| 174.000 | | | | | | | .8639 | | | | | | | | |
| 180.000 | 1.5075 | .8052 | .4714 | .3874 | .3237 | .2857 | | 1.1103 | | .0002 | -.1031 | -.0637 | -.0393 | -.0075 | |
| 305.000 | | | .4612 | .2929 | .3525 | .1794 | | .2328 | | .1703 | | | | | |
| 320.000 | | | .3811 | .3941 | .4535 | .0475 | | .2244 | | .0367 | .1330 | -.0247 | .0011 | -.0992 | -.0041 |
| 340.000 | | | .3098 | .3945 | .4496 | .0517 | | .0709 | | .1197 | | | | | |

| K/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0935 | .1454 | .2754 | .2184 | -.1071 | -.1647 | -.1142 | | -.0804 | -.0871 |
| 40.000 | -.0348 | .0932 | .2597 | .0606 | -.1466 | -.1209 | -.1227 | | -.1069 | -.0903 |
| 70.000 | -.0716 | -.0775 | -.0836 | .0040 | .0000 | -.0270 | -.0435 | | | |
| 90.000 | -.0616 | -.0527 | -.0516 | .0424 | -.0042 | -.0195 | -.0307 | | | |
| 105.000 | | | .0000 | .0506 | -.0224 | -.0487 | -.0701 | | | |
| 110.000 | | | | | | | | -.1017 | | |
| 120.000 | -.0410 | -.0413 | .0478 | .0912 | .1285 | .0284 | -.0442 | -.0968 | | |
| 135.000 | | | .0510 | .1645 | .1275 | .0122 | .0044 | | | |
| 150.000 | -.0155 | - .217 | -.0224 | .1901 | .0702 | .0474 | .0630 | | | |
| 165.000 | -.0126 | | -.0208 | | .2627 | .1486 | -.0957 | | | |
| 180.000 | -.0062 | -.0124 | -.0192 | .2275 | | | | | | |
| 320.000 | .0030 | .1482 | .2271 | .0691 | -.0871 | -.1113 | -.1486 | | | |

ARC97-019 1A8: LVAP(ALLHL SEALED) ORB. FUSELAGE (RE*B38)

ALPHA0( 41 = -.081 BETA0 ( 41 = 4.323

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5509 | .7600 | .2462 | .1625 | .5223 | .4235 | | .0258 | | .0915 | .1437 | -.0561 | -.0430 | -.1182 | -.0889 |
| 20.000 | | | .2480 | .1368 | .4400 | .3320 | | .0285 | | -.0220 | | | | | |
| 40.000 | | | .2969 | .1382 | .2786 | .1092 | | .0752 | | -.0101 | .0562 | .0235 | -.0071 | -.0897 | -.0491 |
| 55.000 | | | .3159 | .1199 | .1181 | .1518 | | .1225 | | .1009 | | | | | |
| 70.000 | | | .3130 | .1554 | .0868 | .0712 | | .0977 | | .0856 | -.0065 | -.0358 | -.0325 | -.0740 | |
| 90.000 | | .5234 | .3394 | .1973 | .1076 | .0726 | | .0689 | | .1842 | -.0143 | -.0109 | -.0555 | -.0656 | |
| 120.000 | | | .4048 | .2828 | .1655 | .1465 | | .1957 | | .1191 | -.0315 | -.1478 | -.0970 | -.0343 | |
| 140.000 | | | | | | | | | | .0952 | | | | | |
| 150.000 | | | .4214 | .3229 | .2718 | .2243 | | | | .0933 | -.1120 | -.0893 | -.0574 | -.0257 | |
| 151.000 | | | | | | | | | .5896 | | | | | | |
| 156.000 | | | | | | | | .8078 | | | | | | | |
| 162.000 | | | | | | | | | .9430 | | | | | | |
| 165.000 | | | | | | | | | | .0057 | -.1039 | -.0719 | -.0430 | -.0481 | |
| 169.000 | | | | | | | | 1.0104 | | | | | | | |
| 174.000 | | | | | | | .8118 | | | | | | | | |
| 180.000 | 1.5509 | .7489 | .4457 | .3517 | .3165 | .2816 | | 1.0670 | | .0018 | -.1039 | -.0642 | -.0405 | -.0445 | |
| 305.000 | | | .5738 | .3053 | .2968 | .4470 | | .2956 | | .2469 | | | | | |
| 320.000 | | | .4379 | .1688 | .2792 | .2934 | | .2945 | | .0940 | .1030 | -.0078 | .0030 | -.0616 | .0159 |
| 340.000 | | | .3264 | .1751 | .5766 | .1887 | | .0048 | | .1444 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .3790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0871 | .1078 | .3258 | .3290 | -.1551 | -.1678 | -.1103 | | -.0734 | -.0852 |
| 40.000 | .0397 | .0990 | .2748 | .1473 | -.1361 | -.1193 | -.1206 | | -.0727 | -.0795 |
| 70.000 | -.0697 | -.0761 | -.0835 | -.0234 | .0000 | -.0317 | -.0474 | | | |
| 90.000 | -.0690 | -.0509 | -.0658 | .0187 | -.0309 | -.0407 | -.0446 | | | |
| 105.000 | | | .0000 | .0582 | -.0659 | -.0656 | -.0805 | | | |
| 110.000 | | | | | | | | -.1128 | | |
| 120.000 | -.0458 | -.0576 | -.0426 | .0267 | .0548 | -.0407 | -.1046 | -.1309 | | |
| 135.000 | | | -.0337 | .1199 | .0558 | -.0222 | -.0450 | | | |
| 150.000 | -.0267 | -.0330 | .0261 | .1242 | .0904 | -.0073 | -.0201 | | | |
| 165.000 | -.0267 | | .0685 | | .1206 | .0555 | -.1234 | | | |
| 180.000 | -.0367 | -.0323 | .0921 | .1491 | | | | | | |
| 320.000 | .0237 | .1067 | .3147 | -.0756 | -.1361 | -.1486 | -.0819 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET638)

ALPHAO( 4) = -.076 BETAO ( 5) = 6.389

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5277 | .7843 | .2501 | .1916 | .5522 | .2348 | | .0356 | | .1000 | .1239 | -.0839 | -.0914 | -.0339 | -.0914 |
| 20.000 | | | .2283 | .1544 | .4014 | .1732 | | .0127 | | -.0035 | | | | | |
| 40.000 | | | .2473 | .1385 | .3550 | .0511 | | .0482 | | -.0450 | .0417 | .0017 | -.0350 | -.1074 | -.0502 |
| 55.000 | | | .2603 | .1168 | .1055 | .0803 | | .0840 | | .0120 | | | | | |
| 70.000 | | | .2634 | .1157 | .0922 | .0374 | | .0572 | | .0454 | -.0597 | -.0460 | -.0468 | -.0844 | |
| 90.000 | | .4937 | .2991 | .1561 | .0704 | .0529 | | .0461 | | .1142 | -.0520 | -.0458 | -.0621 | -.0660 | |
| 120.000 | | | .3500 | .2390 | .1482 | .1116 | | .1479 | | .0838 | -.0527 | -.1597 | -.0885 | -.0343 | |
| 140.000 | | | | | | | | | | .0614 | | | | | |
| 150.000 | | | .3792 | .3009 | .2489 | .2014 | | | | .0579 | -.1169 | -.0949 | -.0653 | -.0623 | |
| 151.000 | | | | | | | | | .5416 | | | | | | |
| 156.000 | | | | | | | | .8027 | | | | | | | |
| 162.000 | | | | | | | | | .9355 | | | | | | |
| 165.000 | | | | | | | | | | -.0211 | -.1120 | -.0733 | -.0555 | -.0606 | |
| 169.000 | | | | | | | | 1.0125 | | | | | | | |
| 174.000 | | | | | | | .7773 | | | | | | | | |
| 180.000 | 1.5277 | .7378 | .4400 | .3462 | .3073 | .2746 | | 1.0256 | | .0028 | -.0994 | -.0726 | -.0555 | -.0535 | |
| 305.000 | | | .6546 | .3554 | .4034 | .5418 | | .3325 | | .2446 | | | | | |
| 320.000 | | | .4869 | .2338 | .7810 | .3520 | | .2494 | | .1460 | .0512 | .0100 | .0159 | -.0222 | .0477 |
| 340.000 | | | .3468 | .2123 | .7008 | .1548 | | .0255 | | .0951 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.1218 | .0232 | .3380 | .2516 | -.1519 | -.1533 | -.0992 | | -.0611 | -.0791 |
| 40.000 | .0883 | .1510 | .3028 | .2110 | -.1167 | -.1224 | -.1116 | | -.0597 | -.0700 |
| 70.000 | -.0549 | -.0691 | -.0780 | -.0295 | .0000 | -.0370 | -.0559 | | | |
| 90.000 | -.0616 | -.0446 | -.0634 | .0356 | -.0348 | -.0608 | -.0644 | | | |
| 105.000 | | | .0000 | .0344 | -.0903 | -.1024 | -.1024 | | | |
| 110.000 | | | | | | | | -.1262 | | |
| 120.000 | -.0598 | -.0695 | .0497 | .0164 | .0299 | -.0484 | -.1138 | -.1493 | | |
| 135.000 | | | .0512 | .0772 | .0385 | -.0328 | -.0612 | | | |
| 150.000 | -.0484 | -.0498 | .0590 | .1004 | .0593 | -.0278 | -.0534 | | | |
| 165.000 | -.0506 | | .0729 | | .0783 | .0276 | -.1322 | | | |
| 180.000 | -.0730 | -.0698 | .0764 | .0660 | | | | | | |
| 320.000 | .0321 | .0640 | .2345 | -.0583 | -.1277 | -.1486 | -.0800 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB38)

ALPHA0( 51) = 1.937 BETA0 ( 1) = -6.052

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4266 | .7563 | .2387 | .4324 | .3668 | .2662 | | .0253 | | .1012 | .0458 | .0711 | .0477 | -.0480 | .0024 |
| 20.000 | | | .3343 | .3426 | .5782 | .1732 | | .0271 | | .1401 | | | | | |
| 40.000 | | | .5319 | .3166 | .6466 | .4043 | | .3422 | | .1082 | .0069 | .0199 | -.0323 | .0543 | .0247 |
| 55.000 | | | .6261 | .3735 | .4044 | .5167 | | .3213 | | .2233 | | | | | |
| 70.000 | | | .6344 | .4205 | .3349 | .5156 | | .3592 | | .2434 | .0360 | .0328 | .0160 | -.0087 | |
| 90.000 | | .8405 | .6424 | .4591 | .3384 | .3326 | | .3947 | | .1384 | .0735 | .0529 | .0146 | -.0240 | |
| 120.000 | | | .6285 | .4837 | .3463 | .2979 | | .3571 | | .3802 | .1637 | -.0124 | -.0584 | -.0980 | |
| 140.000 | | | | | | | | | | .3575 | | | | | |
| 150.000 | | | .5374 | .3756 | .3175 | .2705 | | | | .1904 | -.0738 | -.0796 | -.0975 | -.0593 | |
| 151.000 | | | | | | | | | .8268 | | | | | | |
| 156.000 | | | | | | | | .8726 | | | | | | | |
| 162.000 | | | | | | | | | .9832 | | | | | | |
| 165.000 | | | | | | | | | | .0658 | -.0829 | -.0657 | -.0779 | -.0650 | |
| 169.000 | | | | | | | | .9947 | | | | | | | |
| 174.000 | | | | | | | .7528 | | | | | | | | |
| 180.000 | 1.4286 | .7411 | .4134 | .3072 | .2691 | .2455 | | .9427 | | -.0155 | -.1145 | -.0837 | -.0650 | -.0650 | |
| 305.000 | | | .2478 | .1486 | .2150 | .0818 | | .0609 | | .0188 | | | | | |
| 320.000 | | | .2352 | .3251 | .2922 | .0432 | | .0459 | | .0093 | .0816 | -.0379 | -.0970 | -.0920 | -.0512 |
| 340.000 | | | .2433 | .3900 | .2894 | .2125 | | .0268 | | .0189 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0093 | .1272 | .4007 | .2821 | -.0805 | -.1704 | -.1668 | | -.1085 | -.0827 |
| 40.000 | -.0298 | .0308 | .1910 | -.0791 | -.1167 | -.1019 | -.0987 | | -.1375 | -.1379 |
| 70.000 | -.0114 | -.0494 | -.0602 | -.0503 | .0050 | .0181 | -.0026 | | | |
| 90.000 | -.0150 | -.0143 | -.0414 | -.0354 | .0686 | .0444 | .0117 | | | |
| 105.000 | | | .0000 | .1013 | .1123 | .0177 | -.0249 | | | |
| 110.000 | | | | | | | | -.0742 | | |
| 120.000 | -.0824 | -.0702 | -.0670 | .0953 | .1379 | .0464 | -.0019 | -.0586 | | |
| 135.000 | | | .0704 | .0899 | .1429 | .0151 | -.0132 | | | |
| 150.000 | -.0714 | -.0627 | .0946 | .0821 | -.0385 | -.0224 | -.0629 | | | |
| 165.000 | -.0717 | | .0949 | | .2118 | .2137 | -.0132 | | | |
| 180.000 | -.0600 | -.0531 | .0864 | .0682 | | | | | | |
| 320.000 | .0935 | .0070 | .3569 | .1372 | -.0207 | -.1146 | -.1324 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET838)

ALPHAO( 5) = 1.942 BETAO ( 2) = -1.906

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4288 | .6820 | .2591 | .4358 | .4428 | .2461 | | .0233 | | .0132 | .2114 | .0213 | .0009 | -.0859 | -.0717 |
| 20.000 | | | .3122 | .3236 | .4544 | .1927 | | .0383 | | .0828 | | | | | |
| 40.000 | | | .4403 | .2762 | .4993 | .2640 | | .2615 | | .0498 | .0107 | -.0250 | .0252 | -.0329 | -.0050 |
| 55.000 | | | .4825 | .2765 | .2723 | .3107 | | .2472 | | .1739 | | | | | |
| 70.000 | | | .4737 | .2965 | .2298 | .2341 | | .2736 | | .1909 | .0192 | .0023 | -.0193 | -.0531 | |
| 90.000 | | .6675 | .4822 | .3282 | .2312 | .2050 | | .2309 | | .2142 | .0563 | .0231 | -.0218 | -.0625 | |
| 120.000 | | | .5003 | .3009 | .2661 | .2201 | | .2521 | | .2475 | .0984 | -.0510 | -.0695 | -.0750 | |
| 140.000 | | | | | | | | | | .2005 | | | | | |
| 150.000 | | | .4600 | .3342 | .2868 | .2369 | | | | .1437 | -.1019 | -.0775 | -.0670 | -.0319 | |
| 151.000 | | | | | | | | | .7004 | | | | | | |
| 155.000 | | | | | | | | .7386 | | | | | | | |
| 162.000 | | | | | | | | | .9536 | | | | | | |
| 165.000 | | | | | | | | | | .0574 | -.1064 | -.0879 | -.0528 | -.0365 | |
| 169.000 | | | | | | | | .9560 | | | | | | | |
| 174.000 | | | | | | | .6973 | | | | | | | | |
| 180.000 | 1.4288 | .7226 | .4019 | .3081 | .2721 | .2415 | | .9879 | | -.0128 | -.1141 | -.0802 | -.0465 | -.0270 | |
| 305.000 | | | .3689 | .2466 | .2830 | .1389 | | .2041 | | .1219 | | | | | |
| 320.000 | | | .3208 | .3546 | .4042 | .0307 | | .1836 | | .0030 | .1651 | -.0322 | -.0406 | -.0899 | -.0128 |
| 340.000 | | | .2920 | .4048 | .4758 | .0627 | | .0525 | | .0591 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0720 | .1884 | .3428 | .2224 | -.1136 | -.1598 | -.1444 | | -.0613 | -.0737 |
| 40.000 | -.0245 | .1217 | .2017 | .0154 | -.1264 | -.1178 | -.1419 | | -.1232 | -.1070 |
| 70.000 | -.0600 | -.0752 | -.0826 | -.0120 | .0000 | -.0314 | -.0461 | | | |
| 90.000 | -.0646 | -.0419 | -.0541 | .0385 | .0049 | -.0169 | -.0407 | | | |
| 105.000 | | | .0000 | .0706 | .0169 | -.0371 | -.0674 | | | |
| 110.000 | | | | | | | | -.1014 | | |
| 120.000 | -.0603 | -.0391 | .0770 | .1051 | .1258 | .0288 | -.0319 | -.0879 | | |
| 135.000 | | | .0713 | .1115 | .1183 | .0320 | -.0102 | | | |
| 150.000 | -.0365 | -.0363 | .0157 | .1396 | .0137 | .0484 | .0650 | | | |
| 165.000 | -.0341 | | -.0352 | | .2221 | .1552 | -.0599 | | | |
| 190.000 | -.0231 | -.0263 | -.0345 | .2150 | | | | | | |
| 320.000 | .0305 | .1536 | .3620 | .0970 | -.0471 | -.1021 | -.1508 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB38)

ALPHAO( 5) = 1.953 BETAO ( 3) = 2.279

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3862 | .7034 | .2397 | .3019 | .4079 | .3001 | | .0231 | | .0117 | .1919 | -.0231 | -.0283 | -.1215 | -.1086 |
| 20.000 | | | .2597 | .3584 | .3914 | .1806 | | .0468 | | -.0015 | | | | | |
| 40.000 | | | .3135 | .2724 | .3784 | .0477 | | .1424 | | -.0113 | .0415 | .0316 | -.0352 | -.1003 | -.0557 |
| 55.000 | | | .3307 | .1998 | .2945 | .1233 | | .1643 | | .1111 | | | | | |
| 70.000 | | | .3328 | .1819 | .1636 | .1651 | | .0888 | | .1493 | -.0122 | -.0245 | -.0419 | -.0787 | |
| 90.000 | | .5440 | .3564 | .2170 | .1313 | .1169 | | .1069 | | .1924 | .0302 | -.0144 | -.0488 | -.0791 | |
| 120.000 | | | .4081 | .2907 | .1887 | .1475 | | .1955 | | .1379 | -.0048 | -.1093 | -.0766 | -.0561 | |
| 140.000 | | | | | | | | | | .1039 | | | | | |
| 150.000 | | | .4091 | .3050 | .2509 | .1978 | | | | .0937 | -.1181 | -.0979 | -.0746 | -.0227 | |
| 151.000 | | | | | | | | | .6328 | | | | | | |
| 156.000 | | | | | | | | .8852 | | | | | | | |
| 162.000 | | | | | | | | | .9126 | | | | | | |
| 165.000 | | | | | | | | | | .0211 | -.1132 | -.0857 | -.0565 | -.0284 | |
| 169.000 | | | | | | | | .9418 | | | | | | | |
| 174.000 | | | | | | | .6770 | | | | | | | | |
| 180.000 | 1.3862 | .7121 | .4088 | .3128 | .2713 | .2347 | | .9913 | | -.0164 | -.1156 | -.0777 | -.0533 | -.0390 | |
| 305.000 | | | .5003 | .2464 | .2752 | .3796 | | .2432 | | .1926 | | | | | |
| 320.000 | | | .3784 | .2050 | .5702 | .2389 | | .2393 | | .0411 | .1235 | -.0255 | -.0352 | -.0521 | -.0174 |
| 340.000 | | | .2949 | .2088 | .5119 | .1809 | | -.0123 | | .1094 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0488 | .1505 | .3038 | .3198 | -.1004 | -.1427 | -.1072 | | -.0759 | -.0805 |
| 40.000 | -.0048 | .0994 | .3495 | .0519 | -.1392 | -.1132 | -.1245 | | -.0984 | -.0840 |
| 70.000 | -.0844 | -.0901 | -.0941 | -.0239 | .0000 | -.0552 | -.0885 | | | |
| 90.000 | -.0844 | -.0821 | -.0720 | -.0088 | -.0310 | -.0321 | -.0454 | | | |
| 105.000 | | | .0000 | .0327 | -.0787 | -.0869 | -.0880 | | | |
| 110.000 | | | | | | | | -.1178 | | |
| 120.000 | -.0585 | -.0599 | .0006 | .0522 | .0849 | -.0032 | -.0695 | -.1121 | | |
| 135.000 | | | -.0517 | .1315 | .0561 | -.0199 | -.0262 | | | |
| 150.000 | -.0330 | -.0378 | -.0421 | .1600 | .0956 | -.0135 | -.0042 | | | |
| 165.000 | -.0326 | | -.0375 | | .1820 | .0919 | -.1118 | | | |
| 180.000 | -.0372 | -.0343 | -.0059 | .1685 | | | | | | |
| 320.000 | .0394 | .1426 | .2615 | .0085 | -.1025 | -.1281 | -.0944 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB38)

ALPHAO( 5) = 1.968 BETAO ( 4) = 6.390

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4118 | .7450 | .2200 | .5674 | .4062 | .1114 | | .0384 | | .0712 | .0990 | -.0964 | -.0997 | -.0250 | -.0988 |
| 20.000 | | | .1976 | .4879 | .2586 | .0493 | | -.0025 | | -.0161 | | | | | |
| 40.000 | | | .2116 | .3337 | .2383 | .0205 | | .0531 | | -.0428 | .0458 | -.0145 | -.0476 | -.1170 | -.0652 |
| 55.000 | | | .2208 | .1493 | .2127 | .0285 | | .0587 | | .0024 | | | | | |
| 70.000 | | | .2253 | .1104 | .0963 | .0707 | | .0283 | | .0250 | -.0407 | -.0565 | -.0549 | -.0969 | |
| 90.000 | | .4387 | .2523 | .1265 | .0655 | .0503 | | .0326 | | .1025 | -.0663 | -.0424 | -.0709 | -.0816 | |
| 120.000 | | | .3089 | .2036 | .1167 | .0954 | | .1292 | | .0696 | -.0607 | -.1594 | -.0920 | -.0452 | |
| 140.000 | | | | | | | | | | .0374 | | | | | |
| 150.000 | | | .3373 | .2509 | .2040 | .1598 | | | | .0335 | -.1294 | -.1070 | -.0761 | -.0655 | |
| 151.000 | | | | | | | | | .4716 | | | | | | |
| 156.000 | | | | | | | | .7192 | | | | | | | |
| 162.000 | | | | | | | | | .8700 | | | | | | |
| 165.000 | | | | | | | | | | -.0414 | -.1241 | -.0872 | -.0705 | -.0776 | |
| 169.000 | | | | | | | | .9178 | | | | | | | |
| 174.000 | | | | | | | .6801 | | | | | | | | |
| 180.000 | 1.4118 | .6959 | .3893 | .2930 | .2553 | .2251 | | .9278 | | -.0169 | -.1111 | -.0906 | -.0750 | -.0744 | |
| 305.000 | | | .6296 | .3498 | .5951 | .5080 | | .3013 | | .2164 | | | | | |
| 320.000 | | | .4555 | .3694 | .7127 | .3272 | | .1838 | | .1470 | .0353 | -.0021 | -.0042 | -.0021 | .0330 |
| 340.000 | | | .3088 | .5778 | .5843 | .1128 | | .0361 | | .0258 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.1298 | .0542 | .3000 | .2261 | -.1489 | -.1542 | -.0960 | | -.0597 | -.0728 |
| 40.000 | .0585 | .1357 | .2762 | .2108 | -.1134 | -.1180 | -.1194 | | -.0484 | -.0597 |
| 70.000 | -.0698 | -.0822 | -.0904 | -.0464 | .0000 | -.0460 | -.0681 | | | |
| 90.000 | -.0754 | -.0602 | -.0780 | .0161 | -.0481 | -.0651 | -.0691 | | | |
| 105.000 | | | .0000 | .0208 | -.0971 | -.1049 | -.1042 | | | |
| 110.000 | | | | | | | | -.1276 | | |
| 120.000 | -.0737 | -.0805 | .0346 | .0186 | .0225 | -.0489 | -.1120 | -.1431 | | |
| 135.000 | | | .0474 | .0580 | .0240 | -.0461 | -.0681 | | | |
| 150.000 | -.0574 | -.0813 | .0513 | .0680 | .0616 | -.0404 | -.0688 | | | |
| 165.000 | -.0588 | | .0630 | | .0435 | -.0015 | -.1361 | | | |
| 180.000 | -.0843 | -.0741 | .0677 | .0281 | | | | | | |
| 320.000 | -.0060 | .0865 | .2289 | -.0513 | -.1195 | -.1523 | -.0755 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET838)

ALPHA0( 6) = 3.403 BETA0 ( 1) = -6.044

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3456 | .7225 | .3165 | .4926 | .2943 | .1918 | | .0750 | | .0800 | .0604 | .0478 | .0288 | -.0385 | .0073 |
| 20.000 | | | .3193 | .5151 | .5255 | .1248 | | .0321 | | .1071 | | | | | |
| 40.000 | | | .5123 | .4485 | .6723 | .3667 | | .2719 | | .1015 | -.0005 | .0019 | -.0218 | .0462 | .0158 |
| 55.000 | | | .6004 | .4001 | .6050 | .4768 | | .2820 | | .1876 | | | | | |
| 70.000 | | | .6035 | .4022 | .3924 | .4867 | | .3163 | | .2126 | .0142 | .0159 | -.0017 | -.0180 | |
| 90.000 | | .7972 | .6063 | .4323 | .3272 | .3541 | | .3420 | | .1234 | .0597 | .0330 | -.0003 | -.0371 | |
| 120.000 | | | .5793 | .4422 | .3113 | .2655 | | .3215 | | .3448 | .1361 | -.0270 | -.0763 | -.1078 | |
| 140.000 | | | | | | | | | | .3445 | | | | | |
| 150.000 | | | .4870 | .3314 | .2756 | .2233 | | | | .2651 | -.0912 | -.1037 | -.0888 | -.0794 | |
| 151.000 | | | | | | | | | .7670 | | | | | | |
| 156.000 | | | | | | | | .7667 | | | | | | | |
| 162.000 | | | | | | | | | .9076 | | | | | | |
| 165.000 | | | | | | | | | | .0450 | -.0933 | -.0825 | -.0974 | -.0851 | |
| 169.000 | | | | | | | | .8740 | | | | | | | |
| 174.000 | | | | | | | .6392 | | | | | | | | |
| 180.000 | 1.3456 | .6699 | .3639 | .2645 | .2244 | .2002 | | .8373 | | -.0320 | -.1224 | -.0974 | -.0809 | -.0798 | |
| 305.000 | | | .2236 | .2252 | .1911 | .0617 | | .0365 | | .0155 | | | | | |
| 320.000 | | | .2729 | .3535 | .2598 | .0396 | | .0422 | | .0044 | .0639 | -.0506 | -.1054 | -.0805 | -.0330 |
| 340.000 | | | .3030 | .4401 | .2216 | .1423 | | .0370 | | -.0030 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0215 | .1500 | .4608 | .3040 | -.0684 | -.1699 | -.1570 | | -.0861 | -.0539 |
| 40.000 | -.0015 | .0834 | .2380 | -.0714 | -.1117 | -.0394 | -.1178 | | -.1528 | -.1465 |
| 70.000 | -.0129 | -.0515 | -.0643 | -.0572 | .0000 | .0060 | -.0148 | | | |
| 90.000 | -.0168 | -.0192 | -.0462 | -.0452 | .0653 | .0337 | -.0110 | | | |
| 105.000 | | | .0000 | .0404 | .1160 | .0082 | -.0389 | | | |
| 110.000 | | | | | | | | -.0863 | | |
| 120.000 | -.1099 | -.1012 | -.0012 | .0436 | .1114 | .0237 | -.0198 | -.0672 | | |
| 135.000 | | | .0393 | .0550 | .0976 | .0018 | -.0290 | | | |
| 150.000 | -.0883 | -.0711 | .0673 | .0465 | -.0560 | -.0177 | -.0396 | | | |
| 165.000 | -.0872 | | .0513 | | .1593 | .1747 | -.0304 | | | |
| 180.000 | -.0692 | -.0815 | .0534 | .0546 | | | | | | |
| 320.000 | .1057 | .0070 | .3611 | .1415 | -.0135 | -.1061 | -.1273 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET838)

ALPHAO( 6) = 3.401 BETAO ( 2) = -4.060

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3511 | .7282 | .4015 | .5002 | .2744 | .1949 | | .0413 | | .0477 | .1369 | .0302 | .0192 | -.0676 | -.0196 |
| 20.000 | | | .3702 | .5355 | .3973 | .1195 | | .0092 | | .1105 | | | | | |
| 40.000 | | | .4730 | .4646 | .5498 | .3183 | | .2552 | | .0779 | -.0112 | -.0182 | -.0395 | .0039 | .0009 |
| 55.000 | | | .5412 | .3980 | .4642 | .4200 | | .2406 | | .1792 | | | | | |
| 70.000 | | | .5433 | .3556 | .3259 | .3706 | | .2788 | | .1806 | .0085 | .0014 | -.0218 | -.0475 | |
| 90.000 | | .7372 | .5489 | .3770 | .2730 | .2591 | | .3149 | | .1768 | .0372 | .0174 | -.0186 | -.0613 | |
| 120.000 | | | .5381 | .3984 | .2700 | .2345 | | .3007 | | .3235 | .1135 | -.0412 | -.0842 | -.1096 | |
| 140.000 | | | | | | | | | | .2976 | | | | | |
| 150.000 | | | .4660 | .3133 | .2549 | .2033 | | | | .1530 | -.0966 | -.0933 | -.0870 | -.0635 | |
| 151.000 | | | | | | | | | .7345 | | | | | | |
| 156.000 | | | | | | | | .7836 | | | | | | | |
| 162.000 | | | | | | | | | .9055 | | | | | | |
| 165.000 | | | | | | | | | | .0459 | -.1060 | -.0856 | -.0832 | -.0681 | |
| 169.000 | | | | | | | | .8885 | | | | | | | |
| 174.000 | | | | | | | .6485 | | | | | | | | |
| 180.000 | 1.3511 | .6778 | .3678 | .2656 | .2233 | .1911 | | .8778 | | -.0273 | -.1263 | -.0860 | -.0672 | -.0635 | |
| 305.000 | | | .3299 | .2590 | .2528 | .0729 | | .0977 | | .0753 | | | | | |
| 320.000 | | | .3749 | .3465 | .3723 | -.0235 | | .1157 | | .0536 | .1191 | -.0440 | -.0770 | -.1166 | -.0359 |
| 340.000 | | | .3917 | .4313 | .3134 | .0883 | | .0446 | | -.0059 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0473 | .1326 | .3965 | .2549 | -.0874 | -.1720 | -.1584 | | -.0772 | -.0517 |
| 40.000 | .0261 | .1011 | .2290 | .0068 | -.0874 | -.0749 | -.1269 | | -.1443 | -.1471 |
| 70.000 | -.0355 | -.0670 | -.0813 | -.0710 | .0000 | -.0168 | -.0349 | | | |
| 90.000 | -.0394 | -.0376 | -.0617 | -.0239 | .0306 | .0119 | -.0264 | | | |
| 105.000 | | | .0000 | .0760 | .0554 | -.0105 | -.0540 | | | |
| 110.000 | | | | | | | | -.0961 | | |
| 120.000 | -.0907 | -.0724 | .0462 | .0756 | .1118 | .0079 | -.0331 | -.0799 | | |
| 135.000 | | | .0604 | .0778 | .1033 | -.0091 | -.0434 | | | |
| 150.000 | -.0688 | -.0461 | .0735 | .0746 | -.0374 | -.0176 | -.0080 | | | |
| 165.000 | -.0635 | | .0707 | | .1377 | .1378 | -.0501 | | | |
| 180.000 | -.0497 | -.0490 | .0575 | .1150 | | | | | | |
| 320.000 | .0756 | -.0021 | .3443 | .1136 | -.0324 | -.0975 | -.1393 | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET838)

ALPHAO( B) = 3.409 BETAO ( 3) = .180

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3131 | .7136 | .4118 | .4456 | .3037 | .0966 | | .0124 | | -.0102 | .1965 | -.0017 | -.0116 | -.1194 | -.1068 |
| 20.000 | | | .4540 | .4754 | .3128 | .0568 | | .0579 | | .0531 | | | | | |
| 40.000 | | | .4424 | .4694 | .3532 | .0691 | | .1977 | | -.0095 | .0233 | .0033 | -.0220 | -.0746 | -.0273 |
| 55.000 | | | .4083 | .3838 | .3441 | .1269 | | .2047 | | .1309 | | | | | |
| 70.000 | | | .3833 | .2988 | .2724 | .1621 | | .1963 | | .1358 | -.0175 | -.0333 | -.0488 | -.0822 | |
| 90.000 | | .5771 | .3921 | .2679 | .2103 | .1652 | | .1542 | | .1765 | .0127 | -.0130 | -.0523 | -.0913 | |
| 120.000 | | | .4167 | .2984 | .1923 | .1677 | | .2172 | | .1715 | .0321 | -.0838 | -.0916 | -.0933 | |
| 140.000 | | | | | | | | | | .1480 | | | | | |
| 150.000 | | | .3903 | .2780 | .2258 | .1800 | | | | .0942 | -.1218 | -.1034 | -.0815 | -.0387 | |
| 151.000 | | | | | | | | | .5914 | | | | | | |
| 156.000 | | | | | | | | .6424 | | | | | | | |
| 162.000 | | | | | | | | | .8758 | | | | | | |
| 165.000 | | | | | | | | | | .0152 | -.1250 | -.1010 | -.0669 | -.0369 | |
| 169.000 | | | | | | | | .9053 | | | | | | | |
| 174.000 | | | | | | | .6781 | | | | | | | | |
| 180.000 | 1.3131 | .6564 | .3591 | .2703 | .2304 | .1962 | | .9181 | | -.0329 | -.1299 | -.0993 | -.0592 | -.0320 | |
| 305.000 | | | .4171 | .2408 | .2599 | .2951 | | .1921 | | .1273 | | | | | |
| 320.000 | | | .3599 | .3314 | .4141 | .2138 | | .1963 | | .0356 | .0496 | -.0318 | -.0319 | -.0798 | -.0192 |
| 340.000 | | | .3212 | .4062 | .4085 | .0790 | | .0510 | | .0695 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0255 | .1710 | .2956 | .2415 | -.0926 | -.1495 | -.1046 | | -.0751 | -.0801 |
| 40.000 | -.0139 | .1234 | .3009 | .0896 | -.1349 | -.1150 | -.1248 | | -.1307 | -.1077 |
| 70.000 | -.0813 | -.0899 | -.0998 | -.0200 | .0000 | -.0556 | -.0726 | | | |
| 90.000 | -.0791 | -.0564 | -.0478 | .0091 | -.0328 | -.0513 | -.0634 | | | |
| 105.000 | | | .0000 | .0365 | -.0353 | -.0627 | -.0879 | | | |
| 110.000 | | | | | | | | -.1177 | | |
| 120.000 | -.0759 | -.0507 | .0465 | .0308 | .0902 | .0037 | -.0637 | -.1081 | | |
| 135.000 | | | 0184 | .1083 | .0770 | -.0098 | -.0293 | | | |
| 150.000 | -.0543 | -.0588 | -.0549 | .1354 | .0404 | .0101 | .0265 | | | |
| 165.000 | -.0511 | | -.0556 | | .2115 | .1074 | -.1056 | | | |
| 180.000 | -.0422 | -.0483 | -.0549 | .1720 | | | | | | |
| 320.000 | .0415 | .1735 | .3568 | .1087 | -.0858 | -.0772 | -.1209 | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET838)

ALPHAO( 6) = 3.415 BETAO ( 4) = 3.721

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3514 | .6713 | .3378 | .5335 | .2655 | .0652 | | .0416 | | .0353 | .1003 | -.0729 | -.0591 | -.0703 | -.0757 |
| 20.000 | | | .3378 | .4942 | .1959 | .0448 | | .0211 | | -.0433 | | | | | |
| 40.000 | | | .2742 | .4096 | .2623 | -.0084 | | .1114 | | -.0269 | .0655 | -.0030 | -.0657 | -.1169 | -.0163 |
| 55.000 | | | .2524 | .2454 | .2307 | .0420 | | .0902 | | .0711 | | | | | |
| 70.000 | | | .2394 | .1702 | .1646 | .0923 | | .0277 | | .0975 | -.0378 | -.0610 | -.0622 | -.1044 | |
| 90.000 | | .4419 | .2559 | .1431 | .1140 | .0828 | | .0579 | | .1431 | -.0037 | -.0414 | -.0734 | -.1016 | |
| 120.000 | | | .3058 | .2050 | .1233 | .0941 | | .1358 | | .1028 | -.0388 | -.1347 | -.1009 | -.0605 | |
| 140.000 | | | | | | | | | | .0550 | | | | | |
| 150.000 | | | .3178 | .2342 | .1891 | .1451 | | | | .0378 | -.1365 | -.1110 | -.0842 | -.0394 | |
| 151.000 | | | | | | | | | .4629 | | | | | | |
| 156.000 | | | | | | | | .6162 | | | | | | | |
| 162.000 | | | | | | | | | .8080 | | | | | | |
| 165.000 | | | | | | | | | | -.0413 | -.1337 | -.0978 | -.0713 | -.0622 | |
| 169.000 | | | | | | | | .8479 | | | | | | | |
| 174.000 | | | | | | | .6244 | | | | | | | | |
| 180.000 | 1.3514 | .6238 | .3466 | .2584 | .2219 | .1898 | | .8753 | | -.0367 | -.1270 | -.0908 | -.0790 | -.0767 | |
| 305.000 | | | .5305 | .4324 | .5349 | .4162 | | .2512 | | .1699 | | | | | |
| 320.000 | | | .3966 | .5864 | .6150 | .2085 | | .2060 | | .1000 | .0325 | -.0235 | -.0407 | .0100 | -.0149 |
| 340.000 | | | .3509 | .5478 | .4644 | .0631 | | -.0078 | | .0912 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0860 | .1429 | .2658 | .3516 | -.1416 | -.1308 | -.0925 | | -.0715 | -.0832 |
| 40.000 | .0402 | .1198 | .3794 | .1603 | -.1270 | -.0943 | -.1191 | | -.0747 | -.0829 |
| 70.000 | -.0906 | -.0963 | -.1004 | -.0444 | .0000 | -.0570 | -.0733 | | | |
| 90.000 | -.0984 | -.0750 | -.0886 | -.0163 | -.0392 | -.0456 | -.0567 | | | |
| 105.000 | | | .0000 | .0328 | -.0762 | -.0883 | -.0971 | | | |
| 110.000 | | | | | | | | -.1262 | | |
| 120.000 | -.0798 | -.0836 | -.0480 | .0158 | .0284 | -.0346 | -.0893 | -.1266 | | |
| 135.000 | | | -.0637 | .0750 | .0355 | -.0513 | -.0606 | | | |
| 150.000 | -.0575 | -.0630 | .0385 | .0544 | .0266 | -.0325 | -.0506 | | | |
| 165.000 | -.0586 | | .0574 | | .0540 | .0030 | -.1302 | | | |
| 180.000 | -.0643 | -.0608 | .0581 | .0729 | | | | | | |
| 320.000 | .0654 | .1757 | .2921 | -.0246 | -.1110 | -.1252 | -.0971 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB38)

ALPHAO( 6) = 3.418 BETAO ( 5) = 6.394

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3076 | .7086 | .4286 | .4607 | .2519 | .0642 | | .0251 | | .0580 | .0903 | -.1011 | -.1119 | -.0537 | -.1006 |
| 20.000 | | | .4022 | .4150 | .1264 | .0241 | | .0065 | | -.0322 | | | | | |
| 40.000 | | | .2990 | .3443 | .1450 | .0399 | | .0455 | | -.0551 | .0270 | -.0246 | -.0666 | -.1255 | -.0562 |
| 55.000 | | | .2289 | .2462 | .1499 | .0023 | | .0302 | | -.0008 | | | | | |
| 70.000 | | | .1937 | .1496 | .1534 | .0375 | | .0260 | | .0058 | -.0506 | -.0737 | -.0729 | -.1126 | |
| 90.000 | | .3874 | .2137 | .1162 | .0933 | .0498 | | .0201 | | .0747 | -.0748 | -.0533 | -.0892 | -.1014 | |
| 120.000 | | | .2648 | .1673 | .0892 | .0684 | | .1200 | | .0692 | -.0621 | -.1649 | -.1119 | -.0631 | |
| 140.000 | | | | | | | | | | .0228 | | | | | |
| 150.000 | | | .2923 | .2150 | .1674 | .1220 | | | | .0151 | -.1401 | -.1161 | -.0847 | -.0633 | |
| 151.000 | | | | | | | | | .4167 | | | | | | |
| 156.000 | | | | | | | | .6059 | | | | | | | |
| 162.000 | | | | | | | | | .8119 | | | | | | |
| 165.000 | | | | | | | | | | -.0614 | -.1366 | -.0987 | -.0837 | -.0882 | |
| 169.000 | | | | | | | | .8515 | | | | | | | |
| 174.000 | | | | | | | .8252 | | | | | | | | |
| 180.000 | 1.3076 | .6221 | .3511 | .2543 | .2121 | .1822 | | .8348 | | -.0372 | -.1225 | -.1070 | -.0962 | -.0896 | |
| 305.000 | | | .5999 | .5093 | .6378 | .4744 | | .2948 | | .1949 | | | | | |
| 320.000 | | | .4350 | .5427 | .6764 | .3156 | | .1545 | | .1201 | .0105 | -.0216 | -.0199 | -.0023 | .0251 |
| 340.000 | | | .4547 | .4853 | .4434 | .0526 | | .0340 | | -.0235 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.1230 | .1078 | .3235 | .2469 | -.1425 | -.1529 | -.0950 | | -.0653 | -.0759 |
| 40.000 | .0641 | .1426 | .3100 | .2330 | -.1119 | -.1126 | -.1305 | | -.0437 | -.0678 |
| 70.000 | -.0790 | -.0900 | -.0985 | -.0739 | .0000 | -.0577 | -.0790 | | | |
| 90.000 | -.0875 | -.0722 | -.0892 | -.0108 | -.0481 | -.0702 | -.0769 | | | |
| 105.000 | | | .0000 | .0170 | -.0987 | -.1041 | -.1081 | | | |
| 110.000 | | | | | | | | -.1319 | | |
| 120.000 | -.0868 | -.0921 | .0170 | .0185 | .0189 | -.0460 | -.1042 | -.1344 | | |
| 135.000 | | | .0348 | .0499 | .0207 | -.0492 | -.0705 | | | |
| 150.000 | -.0715 | -.0748 | .0352 | .0431 | .0210 | -.0520 | -.0772 | | | |
| 165.000 | -.0728 | | .0380 | | .0096 | -.0325 | -.1369 | | | |
| 180.000 | -.0903 | -.0810 | .0352 | .0210 | | | | | | |
| 320.000 | .0166 | .1118 | .2408 | -.0139 | -.1158 | -.0403 | -.1074 | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET838)

ALPHAO( 7) = 6.122 BETAO ( 1) = -4.040

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2903 | .7437 | .5901 | .4809 | .2265 | .0371 | | .0308 | | .0351 | .1265 | .0112 | -.0043 | -.0712 | .0004 |
| 20.000 | | | .5967 | .5180 | .3891 | .0939 | | .0171 | | .0986 | | | | | |
| 40.000 | | | .5874 | .5152 | .5704 | .2676 | | .1940 | | .0812 | -.0266 | -.0241 | -.0650 | .0023 | -.0109 |
| 55.000 | | | .5614 | .4605 | .4972 | .3656 | | .2093 | | .1426 | | | | | |
| 70.000 | | | .5262 | .3947 | .3656 | .3776 | | .2384 | | .1503 | -.0123 | -.0213 | -.0452 | -.0535 | |
| 90.000 | | .6932 | .5141 | .3687 | .2892 | .2981 | | .2679 | | .0889 | .0192 | -.0067 | -.0397 | -.0754 | |
| 120.000 | | | .4913 | .3628 | .2410 | .2343 | | .2717 | | .2855 | .0849 | -.0615 | -.1024 | -.1302 | |
| 140.000 | | | | | | | | | | .2848 | | | | | |
| 150.000 | | | .4135 | .2706 | .2150 | .1786 | | | | .1499 | -.1056 | -.1187 | -.1097 | -.0799 | |
| 151.000 | | | | | | | | | .6854 | | | | | | |
| 156.000 | | | | | | | | .7065 | | | | | | | |
| 162.000 | | | | | | | | | .8495 | | | | | | |
| 165.000 | | | | | | | | | | .0276 | -.1157 | -.1031 | -.1021 | -.0866 | |
| 169.000 | | | | | | | | .7951 | | | | | | | |
| 174.000 | | | | | | | .5792 | | | | | | | | |
| 180.000 | 1.2903 | .6116 | .3181 | .2223 | .1828 | .1601 | | .8048 | | -.0427 | -.1367 | -.0983 | -.0813 | -.0782 | |
| 305.000 | | | .4423 | .2783 | .2672 | .0256 | | .0913 | | .0545 | | | | | |
| 320.000 | | | .5499 | .39 5 | .3107 | .0004 | | .1197 | | .0126 | .1017 | -.0629 | -.0896 | -.0930 | -.0491 |
| 340.000 | | | .6068 | .4406 | .2270 | -.0172 | | .0299 | | -.0011 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0344 | .1317 | .4141 | .2679 | -.0816 | -.1774 | -.1578 | | -.0778 | -.0605 |
| 40.000 | .0308 | .1175 | .2420 | .0283 | -.0745 | -.0592 | -.1398 | | -.1558 | -.1540 |
| 70.000 | -.0396 | -.0704 | -.0852 | -.0771 | .0000 | -.0244 | -.0468 | | | |
| 90.000 | -.0428 | -.0449 | -.0721 | -.0675 | .0295 | -.0007 | -.0425 | | | |
| 105.000 | | | .0000 | .0571 | .0724 | -.0237 | -.0669 | | | |
| 110.000 | | | | | | | | -.1101 | | |
| 120.000 | -.1192 | -.1026 | .0237 | .0426 | .0923 | -.0054 | -.0482 | -.0931 | | |
| 135.000 | | | .0216 | .0639 | .0810 | -.0220 | -.0991 | | | |
| 150.000 | -.0803 | -.0246 | .0319 | .0416 | -.0741 | -.0499 | -.0524 | | | |
| 165.000 | -.0789 | | .0383 | | .0976 | .0975 | -.0708 | | | |
| 180.000 | -.0672 | -.0629 | .0329 | .0966 | | | | | | |
| 320.000 | .0740 | .0131 | .4301 | .1636 | -.0372 | -.0938 | -.1426 | | | |

ARC97-019 IA81 LVAP(ALL SEALED) ORB. FUSEL (RET838)

ALPHA0( 7) = 6.126 BETA0 ( 2) = -1.990

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3222 | .7993 | .6318 | .5354 | .1052 | .0042 | | .0445 | | .0108 | .1765 | .0144 | -.0252 | -.1089 | -.0387 |
| 20.000 | | | .6366 | .5421 | .1691 | .0196 | | -.0052 | | .0504 | | | | | |
| 40.000 | | | .6203 | .5139 | .3661 | .1855 | | .1928 | | .0372 | -.0416 | -.0553 | -.0245 | .0231 | -.0281 |
| 55.000 | | | .5321 | .4106 | .3510 | .2490 | | .1859 | | .1275 | | | | | |
| 70.000 | | | .4854 | .3524 | .2983 | .2287 | | .2102 | | .1195 | -.0234 | -.0381 | -.0613 | -.0808 | |
| 90.000 | | .6075 | .4619 | .3323 | .2540 | .2101 | | .2422 | | .1254 | -.0017 | -.0193 | -.0544 | -.0950 | |
| 120.000 | | | .4373 | .3243 | .2192 | .1834 | | .2217 | | .2501 | .0585 | -.0752 | -.1075 | -.1283 | |
| 140.000 | | | | | | | | | | .1983 | | | | | |
| 150.000 | | | .3759 | .2523 | .2059 | .1694 | | | | .1065 | -.1166 | -.1092 | -.1030 | -.0652 | |
| 151.000 | | | | | | | | | .5966 | | | | | | |
| 156.000 | | | | | | | | .6105 | | | | | | | |
| 162.000 | | | | | | | | | .7842 | | | | | | |
| 165.000 | | | | | | | | | | .0172 | -.1267 | -.1051 | -.0874 | -.0660 | |
| 169.000 | | | | | | | | .7623 | | | | | | | |
| 174.000 | | | | | | | .5211 | | | | | | | | |
| 180.000 | 1.3222 | .6141 | .3085 | .2200 | .1880 | .1704 | | .8074 | | -.0458 | -.1344 | -.1009 | -.0714 | -.0536 | |
| 305.000 | | | .4595 | .2941 | .2476 | .0785 | | .1650 | | .0992 | | | | | |
| 320.000 | | | .5775 | .4261 | .2497 | .0172 | | .1720 | | -.0339 | .1121 | -.0613 | -.0512 | -.0723 | -.0203 |
| 340.000 | | | .6450 | .4927 | .1199 | .0115 | | .0361 | | .0512 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0364 | .2064 | .3575 | .2817 | -.1016 | -.1581 | -.1378 | | -.0565 | -.0625 |
| 40.000 | .0580 | .1685 | .2220 | .0456 | -.1055 | -.0845 | -.1470 | | -.1584 | -.1333 |
| 70.000 | -.0621 | -.0859 | -.1013 | -.0921 | .0000 | -.0451 | -.0691 | | | |
| 90.000 | -.0642 | -.0592 | -.0793 | -.0263 | .0125 | -.0270 | -.0613 | | | |
| 105.000 | | | .0000 | .0473 | .0338 | -.0415 | -.0776 | | | |
| 110.000 | | | | | | | | -.1173 | | |
| 120.000 | -.0798 | -.0316 | .0196 | .0455 | .0640 | -.0120 | -.0577 | -.1010 | | |
| 135.000 | | | .0221 | .0534 | .0423 | -.0163 | -.0372 | | | |
| 150.000 | -.0730 | -.0558 | .0242 | .0558 | .0448 | .0394 | .0252 | | | |
| 165.000 | -.0713 | | .0015 | | .1713 | .1007 | -.0850 | | | |
| 180.000 | -.0603 | -.0525 | -.0511 | .1705 | | | | | | |
| 320.000 | .0389 | .1768 | .3881 | .1923 | -.0319 | -.0953 | -.1463 | | | |

ARC97-019 1A81 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB38)

ALPHA0( 7) = 6.130 BETA0 ( 3) = .192

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2909 | .7811 | .6033 | .4453 | .1078 | .0322 | | .0112 | | -.0257 | .2074 | -.0145 | -.0126 | -.1203 | -.0531 |
| 20.000 | | | .6185 | .4867 | .1292 | .0322 | | .0427 | | .0184 | | | | | |
| 40.000 | | | .5939 | .4842 | .2895 | .0483 | | .2105 | | -.0295 | -.0418 | -.0026 | -.0414 | -.0220 | -.0212 |
| 55.000 | | | .5271 | .3860 | .3183 | .1251 | | .1695 | | .1188 | | | | | |
| 70.000 | | | .4559 | .3215 | .2678 | .1455 | | .1785 | | .1046 | -.0278 | -.0506 | -.0706 | -.0936 | |
| 90.000 | | .5614 | .4099 | .2973 | .2215 | .1557 | | .1508 | | .1292 | -.0127 | -.0237 | -.0679 | -.1043 | |
| 120.000 | | | .3877 | .2832 | .1886 | .1567 | | .2112 | | .1723 | .0370 | -.0887 | -.1061 | -.1123 | |
| 140.000 | | | | | | | | | | .1310 | | | | | |
| 150.000 | | | .3470 | .2376 | .1921 | .1595 | | | | .0788 | -.1294 | -.1102 | -.0956 | -.0538 | |
| 15[illegible].000 | | | | | | | | | .5456 | | | | | | |
| 156.000 | | | | | | | | .5764 | | | | | | | |
| 162.000 | | | | | | | | | .7965 | | | | | | |
| 165.000 | | | | | | | | | | .0013 | -.1340 | -.1102 | -.0745 | -.0523 | |
| 169.000 | | | | | | | | .7948 | | | | | | | |
| 174.000 | | | | | | | .5796 | | | | | | | | |
| 180.000 | 1.2909 | .5857 | .3116 | .2253 | .1907 | .1697 | | .8277 | | -.0450 | -.1382 | -.1092 | -.0647 | -.0467 | |
| 305.000 | | | .4702 | .2815 | .3145 | .2377 | | .1671 | | .1113 | | | | | |
| 320.000 | | | .5339 | .3594 | .3594 | .1458 | | .1754 | | .0262 | -.0050 | -.0623 | -.0432 | -.0609 | -.0222 |
| 340.000 | | | .5999 | .3927 | .1925 | .0739 | | -.0229 | | .0462 | | | | | |

| X/LB | .6520 | .7230 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0310 | .2043 | .3418 | .2797 | -.0840 | -.1571 | -.0970 | | -.0847 | -.0704 |
| 40.000 | .0150 | .1610 | .3423 | .0931 | -.1220 | -.1234 | -.1275 | | -.1323 | -.1093 |
| 70.000 | -.0846 | -.0982 | -.1080 | -.0421 | .0000 | -.0680 | -.0811 | | | |
| 90.000 | -.0786 | -.0640 | -.0774 | .0113 | -.0204 | -.0481 | -.0726 | | | |
| 105.000 | | | .0000 | .0469 | -.0087 | -.0542 | -.0882 | | | |
| 110.000 | | | | | | | | -.1222 | | |
| 120.000 | -.0825 | -.0539 | .0341 | .0474 | .0658 | -.0091 | -.0669 | -.1108 | | |
| 135.000 | | | .0280 | .0534 | .0339 | -.0134 | -.0407 | | | |
| 150.000 | -.0733 | -.0749 | -.0535 | .1386 | -.0023 | .0029 | .0182 | | | |
| 165.000 | -.0704 | | -.0688 | | .2110 | .0962 | -.1133 | | | |
| 180.000 | -.0609 | -.0674 | -.0717 | .1766 | | | | | | |
| 323.000 | .0660 | .2117 | .3911 | .1496 | -.0705 | -.0977 | -.1222 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RET838)

ALPHA0( 7) = 6.133 BETA0 ( 4) = 2.291

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0030 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2734 | .8068 | .5873 | .4866 | .0969 | .0969 | | -.0070 | | .0069 | .1574 | -.0414 | -.0601 | -.1383 | -.1079 |
| 20.000 | | | .5870 | .4845 | .0537 | .0379 | | .0232 | | -.0365 | | | | | |
| 40.000 | | | .5382 | .4610 | .1968 | .0786 | | .1079 | | -.0622 | .0189 | .0049 | -.0684 | -.0990 | -.0022 |
| 55.000 | | | .4301 | .3158 | .2277 | .0642 | | .1860 | | .0791 | | | | | |
| 70.000 | | | .3704 | .2639 | .2130 | .0944 | | .1061 | | .1023 | -.0368 | -.0621 | -.0768 | -.1067 | |
| 90.000 | | .4677 | .3395 | .0000 | .1758 | .1113 | | .0929 | | .1277 | -.0074 | -.0427 | -.0816 | -.1122 | |
| 120.000 | | | .3255 | .2361 | .1516 | .1281 | | .1794 | | .1080 | -.0200 | -.1004 | -.1074 | -.0949 | |
| 140.000 | | | | | | | | | | .0795 | | | | | |
| 150.000 | | | .3107 | .2186 | .1762 | .1407 | | | | .0592 | -.1329 | -.1209 | -.0803 | -.0512 | |
| 151.000 | | | | | | | | | .5143 | | | | | | |
| 156.000 | | | | | | | | .6348 | | | | | | | |
| 162.000 | | | | | | | | | .7398 | | | | | | |
| 165.000 | | | | | | | | | | -.0109 | -.1354 | -.1091 | -.0743 | -.0569 | |
| 169.000 | | | | | | | | .7561 | | | | | | | |
| 174.000 | | | | | | | .5532 | | | | | | | | |
| 180.000 | 1.2734 | .5641 | .3055 | .2228 | .1898 | .1642 | | .8135 | | -.0452 | -.1354 | -.0980 | -.0789 | -.0625 | |
| 305.000 | | | .5174 | .4021 | .4568 | .3011 | | .1992 | | .1462 | | | | | |
| 320.000 | | | .5832 | .4789 | .5921 | .1067 | | .2103 | | .0245 | .0098 | -.0615 | -.0465 | -.0390 | -.0349 |
| 340.000 | | | .6148 | .4859 | .2828 | .0600 | | .0145 | | .0627 | | | | | |

| X/LB | .0520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0075 | .2071 | .3572 | .2957 | -.1024 | -.1298 | -.0942 | | -.0613 | -.0556 |
| 40.000 | .0116 | .1049 | .3999 | .0975 | -.1177 | -.0882 | -.1325 | | -.1178 | -.0955 |
| 70.000 | -.0034 | -.1001 | -.1099 | -.0380 | .0000 | -.0652 | -.0857 | | | |
| 90.000 | -.0852 | -.0636 | -.0590 | -.0046 | -.0424 | -.0591 | -.0783 | | | |
| 105.000 | | | .0000 | .0018 | -.0520 | -.0818 | -.1006 | | | |
| 110.000 | | | | | | | | -.1293 | | |
| 120.000 | -.0998 | -.0636 | -.0199 | .0144 | .0535 | -.0218 | -.0861 | -.1212 | | |
| 135.000 | | | -.0426 | .1060 | .0751 | -.0283 | -.0404 | | | |
| 150.000 | -.0689 | -.0718 | -.0718 | .1181 | .0701 | -.0184 | -.0187 | | | |
| 165.000 | -.0679 | | -.0633 | | .1440 | .0575 | -.1167 | | | |
| 180.000 | -.0664 | -.0654 | .0054 | .0957 | | | | | | |
| 320.000 | .0553 | .1836 | .2946 | .0755 | -.0889 | -.1024 | -.1222 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RE1838)

ALPHA0( 7) = 8.138 BETA0 ( 5) = 3.707

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1500 | .1860 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .60 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2420 | .7252 | .6463 | .4836 | 1244 | .0148 | | .0598 | | .0120 | .1106 | -.0938 | -.0660 | -.0497 | -.0820 |
| 20.000 | | | .5986 | .4622 | .0876 | -.0049 | | .0356 | | -.0528 | | | | | |
| 40.000 | | | .4981 | .4088 | .1097 | .0162 | | .0854 | | -.0543 | .0426 | -.0045 | -.0879 | -.1224 | -.0004 |
| 55.000 | | | .3845 | .2814 | .1911 | .0165 | | .0690 | | .0499 | | | | | |
| 70.000 | | | .2911 | .2262 | .1781 | .0598 | | .0294 | | .0818 | -.0539 | -.0809 | -.0779 | -.1185 | |
| 90.000 | | .4063 | .2451 | .1918 | .1420 | .0858 | | .0419 | | .1093 | -.0153 | -.0567 | -.0907 | -.1178 | |
| 120.000 | | | .2641 | .1824 | .1188 | .1023 | | .1308 | | .0896 | -.0501 | -.1283 | -.1140 | -.0810 | |
| 140.000 | | | | | | | | | | .0499 | | | | | |
| 150.000 | | | .2693 | .1946 | .1540 | .1213 | | | | .0247 | -.1409 | -.1217 | -.0952 | -.0525 | |
| 151.000 | | | | | | | | | .4200 | | | | | | |
| 156.000 | | | | | | | | .5379 | | | | | | | |
| 162.000 | | | | | | | | | .7870 | | | | | | |
| 165.000 | | | | | | | | | | -.0525 | -.1427 | -.1081 | -.0834 | -.0706 | |
| 180.000 | | | | | | | | .7883 | | | | | | | |
| 174.000 | | | | | | | .9478 | | | | | | | | |
| 180.000 | 1.2420 | .5736 | .2985 | .2168 | .1852 | .1603 | | .7953 | | -.0525 | -.1381 | -.1067 | -.0949 | -.0870 | |
| 305.000 | | | .6168 | .4695 | .5082 | .3778 | | .2485 | | .1485 | | | | | |
| 320.000 | | | .6973 | .5274 | .4954 | .1779 | | .1412 | | .0780 | -.0185 | -.0424 | -.0400 | -.0050 | -.0018 |
| 340.000 | | | .8980 | .5055 | .2798 | .0471 | | -.0130 | | .0068 | | | | | |

| X/LB | .6520 | 7290 | .7790 | .8210 | .8790 | .9210 | .9800 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0096 | .1621 | .2822 | .3847 | -.1346 | -.0994 | -.0967 | | -.0602 | -.0715 |
| 40.000 | .0422 | .1302 | .4171 | .1675 | -.1193 | -.0905 | -.1172 | | -.0697 | -.0764 |
| 70.000 | -.0826 | -.0875 | -.1044 | -.0421 | .0000 | -.0731 | -.0839 | | | |
| 90.000 | -.0969 | -.0781 | -.0923 | -.0218 | -.0486 | -.0489 | -.0655 | | | |
| 105.000 | | | .0000 | .0020 | -.0774 | -.0905 | -.1016 | | | |
| 110.000 | | | | | | | | -.1293 | | |
| 120.000 | -.0887 | -.0837 | -.0403 | .0147 | .0981 | -.0197 | -.0948 | -.1357 | | |
| 135.000 | | | -.0880 | .3884 | .0414 | -.0482 | -.0941 | | | |
| 150.000 | -.0748 | -.0781 | -.0069 | .0247 | .0229 | -.0378 | -.0823 | | | |
| 165.000 | -.0748 | | .0281 | | .0360 | -.0116 | -.1300 | | | |
| 180.000 | -.0795 | -.0888 | .0262 | .0442 | | | | | | |
| 320.000 | .0053 | .1537 | .2626 | .0108 | -.0959 | -.0960 | -.1229 | | | |

ARC97-01B IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET839) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.550 RN/FT = 2.500
ELV-IB = .000 ELV OB = .000
RUDDER = .000 SPOIL = .000

ALPHA0( 1) = -6.293 BETA0 ( 1) = .406

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| YWI | | | | | | | | | | | | | | | |
| .000 | 1.4702 | 1.0531 | .5774 | .2968 | .3064 | 1.0734 | | -.0845 | | -.2562 | .0355 | -.0063 | .0721 | .0073 | -.1678 |
| 20.000 | | | .5900 | .3248 | .3195 | .7595 | | -.1073 | | -.1992 | | | | | |
| 40.000 | | | .6638 | .3854 | .3116 | .5325 | | -.0728 | | -.1647 | -.0190 | .0014 | .1002 | -.1311 | -.0359 |
| 55.000 | | | .7086 | .4595 | .3715 | .3947 | | .1744 | | .0496 | | | | | |
| 70.000 | | | .7086 | .4724 | .3773 | .3513 | | .2805 | | .1429 | -.1850 | -.1863 | -.0908 | .0031 | |
| 90.000 | | .0468 | .7289 | .5046 | .3883 | .3397 | | .3589 | | .0000 | -.1523 | -.1943 | -.1717 | .0057 | |
| 120.000 | | | .7485 | .5768 | .4585 | .4404 | | .5919 | | .1719 | -.0891 | -.3059 | -.1430 | -.0246 | |
| 140.000 | | | | | | | | | | .0507 | | | | | |
| 150.000 | | | .7411 | .6055 | .5200 | .5190 | | | | -.0024 | -.2042 | -.1072 | -.0714 | -.0717 | |
| 151.000 | | | | | | | | | .7421 | | | | | | |
| 156.000 | | | | | | | | 1.0095 | | | | | | | |
| 162.000 | | | | | | | | | .8125 | | | | | | |
| 165.000 | | | | | | | | | | -.0550 | -.1879 | -.0699 | -.0511 | -.0530 | |
| 169.000 | | | | | | | | 1.1024 | | | | | | | |
| 174.000 | | | | | | | 1.1754 | | | | | | | | |
| 180.000 | 1.4702 | .8537 | .7135 | .6187 | .5551 | .5451 | | 1.0947 | | -.1902 | -.1995 | -.0191 | -.0446 | -.0493 | |
| 305.000 | | | .7112 | .4453 | .3892 | .4105 | | .1078 | | .0446 | | | | | |
| 320.000 | | | .6622 | .3303 | .3068 | .5419 | | -.1141 | | -.1325 | .0319 | -.0645 | .0012 | .0326 | -.0803 |
| 340.000 | | | .6332 | .2768 | .2962 | .7652 | | -.1692 | | -.1100 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| YWI | | | | | | | | | | |
| .000 | .0448 | .1878 | .3657 | .2774 | -.1660 | -.1867 | -.1799 | | -.1490 | -.1359 |
| 40.000 | -.0059 | .1314 | .2466 | -.0463 | -.1956 | -.1983 | -.2309 | | -.1392 | -.1461 |
| 70.000 | .0323 | -.0595 | .0062 | .1559 | .0000 | .0424 | .0126 | | | |
| 90.000 | .0385 | -.0171 | .1356 | .1667 | .0375 | .0309 | .0034 | | | |
| 105.000 | | | .0000 | .1258 | -.0585 | -.0572 | -.0532 | | | |
| 110.000 | | | | | | | | -.1355 | | |
| 120.000 | .0092 | .0383 | .2715 | .1548 | .0609 | -.0894 | -.1716 | -.1822 | | |
| 135.000 | | | .3359 | .3721 | .1185 | .0560 | .0201 | | | |
| 150.000 | .0017 | .0314 | .3418 | .4011 | .1989 | .1509 | .0739 | | | |
| 165.000 | .0066 | | .3314 | | .4321 | .2303 | -.1447 | | | |
| 180.000 | .0027 | .0262 | .3340 | .5048 | | | | | | |
| 320.000 | -.0003 | .1609 | .3644 | .0971 | -.2154 | -.1496 | -.1986 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB39)

ALPHAO( 2) = -4.229 BETAO ( 1) = -3.806

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4299 | 1.0284 | .5702 | .2821 | .2687 | 1.0930 | | -.0481 | | -.1893 | .0751 | -.0359 | .0514 | -.1321 | -.0592 |
| 20.000 | | | .6342 | .3524 | .2524 | .8001 | | -.2155 | | -.0982 | | | | | |
| 40.000 | | | .7937 | .4735 | .3402 | .5725 | | -.0004 | | -.2334 | -.0466 | -.0462 | .0814 | -.0915 | .0080 |
| 55.000 | | | .8670 | .6037 | .4726 | .3996 | | .2115 | | .0891 | | | | | |
| 70.000 | | | .8485 | .6241 | .4777 | .3631 | | .2788 | | .1918 | -.1393 | -.1264 | -.0730 | .0029 | |
| 90.000 | | .9902 | .8418 | .6328 | .4799 | .3832 | | .3640 | | .0000 | -.0997 | -.1417 | -.1312 | .0143 | |
| 120.000 | | | .8122 | .6372 | .5015 | .4702 | | .6430 | | .2493 | -.0356 | -.2523 | -.1379 | .0073 | |
| 140.000 | | | | | | | | | | .2160 | | | | | |
| 150.000 | | | .7380 | .5827 | .4996 | .4808 | | | | .0078 | -.2358 | -.1593 | -.0864 | -.0513 | |
| 151.000 | | | | | | | | | .8015 | | | | | | |
| 155.000 | | | | | | | | 1.0420 | | | | | | | |
| 162.000 | | | | | | | | | .8509 | | | | | | |
| 165.000 | | | | | | | | | | -.0791 | -.2020 | -.1251 | -.0810 | -.0729 | |
| 169.000 | | | | | | | | 1.0888 | | | | | | | |
| 174.000 | | | | | | | 1.1601 | | | | | | | | |
| 180.000 | 1.4299 | .8931 | .6374 | .5463 | .4840 | .4715 | | 1.0196 | | -.1766 | -.2268 | -.1011 | -.0803 | -.0889 | |
| 305.000 | | | .5288 | .2773 | .2886 | .3526 | | .0146 | | -.0672 | | | | | |
| 320.000 | | | .5460 | .2397 | .2880 | .4648 | | -.2139 | | -.2210 | -.0398 | -.1065 | -.0496 | .0547 | -.0027 |
| 340.000 | | | .5852 | .2311 | .2595 | .6991 | | -.0950 | | -.2876 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0373 | .2875 | .5503 | .2816 | -.1089 | -.1853 | -.1436 | | -.1046 | -.0998 |
| 40.000 | .0755 | .1151 | .2950 | -.0600 | -.2326 | -.2238 | -.3063 | | -.1011 | -.1111 |
| 70 000 | .0308 | -.0641 | -.0754 | .0729 | .0000 | .0409 | .0325 | | | |
| 90.000 | .0475 | -.0243 | -.0349 | .1414 | .0468 | .0223 | -.0020 | | | |
| 105.000 | | | .0000 | .1897 | -.0260 | -.0802 | -.0524 | | | |
| 110.000 | | | | | | | | -.1344 | | |
| 120.000 | .0054 | .0092 | .2474 | .2330 | .0912 | -.0540 | -.0898 | -.1227 | | |
| 135.000 | | | .3098 | .3233 | .1045 | .0316 | .0612 | | | |
| 150.000 | -.0311 | -.0084 | .3034 | .3217 | .1049 | .2039 | .1217 | | | |
| 165.000 | -.0504 | | .2845 | | .4616 | .3099 | -.1195 | | | |
| 180.000 | -.0569 | -.0182 | .2695 | .3292 | | | | | | |
| 320.000 | -.0709 | .2382 | .4544 | .3149 | -.1438 | -.1117 | -.1556 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET839)

ALPHAO( 2) = -4.210 BETAO ( 2) = .382

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4358 | 1.1510 | .5770 | .2119 | .1748 | .9331 | | -.1732 | | -.1797 | .0299 | -.0756 | .0881 | .0162 | -.1479 |
| 20.000 | | | .6003 | .2515 | .1662 | .6793 | | -.2459 | | -.1346 | | | | | |
| 40.000 | | | .6870 | .3257 | .1940 | .4862 | | -.0845 | | -.2823 | -.0285 | -.0191 | .0936 | -.1269 | -.0352 |
| 55.000 | | | .7115 | .4251 | .3225 | .2985 | | .1385 | | .0351 | | | | | |
| 70.000 | | | .6880 | .4491 | .3398 | .2458 | | .2393 | | .1254 | -.1915 | -.1909 | -.1259 | -.0337 | |
| 90.000 | | .8216 | .7023 | .4811 | .3532 | .2771 | | .3381 | | .0000 | -.1693 | -.2043 | -.1973 | -.0206 | |
| 120.000 | | | .7052 | .5370 | .4165 | .3839 | | .5696 | | .1551 | -.1089 | -.3147 | -.1669 | -.0437 | |
| 140.000 | | | | | | | | | | .0422 | | | | | |
| 150.000 | | | .6870 | .5559 | .4750 | .4430 | | | | -.0827 | -.2358 | -.1406 | -.0981 | -.0960 | |
| 151.000 | | | | | | | | | .7205 | | | | | | |
| 158.000 | | | | | | | | .9829 | | | | | | | |
| 162.000 | | | | | | | | | .7874 | | | | | | |
| 165.000 | | | | | | | | | | -.0814 | -.2225 | -.1064 | -.0805 | -.0816 | |
| 169.000 | | | | | | | | 1.0732 | | | | | | | |
| 174.000 | | | | | | | 1.1332 | | | | | | | | |
| 180.000 | 1.4358 | .8793 | .6522 | .5645 | .5066 | .4696 | | 1.0655 | | -.2203 | -.2293 | -.0558 | -.0728 | -.0777 | |
| 305.000 | | | .7020 | .4168 | .3673 | .3589 | | .0875 | | .0183 | | | | | |
| 320.000 | | | .6713 | .2890 | .2301 | .5197 | | -.1154 | | -.2622 | .0125 | -.1057 | -.0009 | .0292 | -.0826 |
| 340.000 | | | .6371 | .2080 | .1735 | .7403 | | -.3101 | | -.0975 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0791 | .2066 | .3596 | .2754 | -.1747 | -.1855 | -.1638 | | -.1368 | -.1280 |
| 40.000 | -.0283 | .1454 | .2663 | -.0134 | -.2110 | -.2274 | -.2414 | | -.1254 | -.1358 |
| 70.000 | .0132 | -.0884 | -.0370 | .1102 | .0000 | .0111 | -.0187 | | | |
| 90.000 | .0223 | -.0460 | .1092 | .1265 | .0039 | .0023 | -.0259 | | | |
| 105.000 | | | .0000 | .1190 | -.0831 | -.0867 | -.0787 | | | |
| 110.000 | | | | | | | | -.1553 | | |
| 120.000 | -.0035 | .0140 | .2303 | .1223 | .0553 | -.1005 | -.1797 | -.1934 | | |
| 135.000 | | | .2992 | .3346 | .1007 | .0250 | .0019 | | | |
| 150.000 | -.0241 | .0163 | .3087 | .3634 | .1752 | .1224 | .0527 | | | |
| 165.000 | -.0221 | | .3077 | | .3944 | .1995 | -.1419 | | | |
| 180.000 | -.0225 | .0082 | .3087 | .4539 | | | | | | |
| 320.000 | -.0015 | .2111 | .3966 | .1347 | -.2172 | -.1595 | -.1973 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB39)

ALPHA0( 2) = -4.235 BETA0 ( 3) = 3.933

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4410 | 1.0251 | .5747 | .2758 | .2612 | 1.1021 | | -.0966 | | -.1489 | -.1091 | -.1126 | .1253 | .0368 | -.1507 |
| 20.000 | | | .5312 | .2440 | .2497 | .6629 | | -.1578 | | -.2921 | | | | | |
| 40.000 | | | .5318 | .2666 | .2291 | .4279 | | -.1797 | | -.1928 | -.0776 | -.0792 | -.0104 | -.2043 | -.1452 |
| 55.000 | | | .5359 | .2940 | .2392 | .3225 | | .0588 | | -.0457 | | | | | |
| 70.000 | | | .5464 | .3039 | .2475 | .2381 | | .1982 | | .0654 | -.2508 | -.2733 | -.1692 | -.0350 | |
| 90.000 | | .6042 | .5706 | .3440 | .2523 | .2189 | | .2878 | | .0000 | -.2258 | -.2709 | -.2377 | -.0436 | |
| 120.000 | | | .5941 | .4325 | .3231 | .2903 | | .4839 | | .0690 | -.1714 | -.3573 | -.2151 | -.1319 | |
| 140.000 | | | | | | | | | | -.0859 | | | | | |
| 150.000 | | | .6144 | .5089 | .4228 | .3705 | | | | -.1322 | -.2454 | -.1207 | -.1188 | -.1309 | |
| 151.000 | | | | | | | | | .6026 | | | | | | |
| 156.000 | | | | | | | | .8959 | | | | | | | |
| 162.000 | | | | | | | | | .7030 | | | | | | |
| 165.000 | | | | | | | | | | -.0975 | -.2470 | -.0780 | -.0908 | -.1075 | |
| 169.000 | | | | | | | | 1.0185 | | | | | | | |
| 174.000 | | | | | | | 1.0868 | | | | | | | | |
| 180.000 | 1.4410 | .8320 | .6465 | .5585 | .4925 | .4406 | | 1.0375 | | -.1859 | -.2238 | -.1153 | -.0793 | -.0919 | |
| 305.000 | | | .8704 | .6266 | .5212 | .4285 | | .1639 | | .0920 | | | | | |
| 320.000 | | | .7578 | .4503 | .3548 | .5919 | | -.0167 | | -.2107 | .0763 | -.1775 | .0237 | -.1361 | -.0428 |
| 340.000 | | | .6709 | .3182 | .2642 | .8126 | | -.2934 | | -.0918 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0580 | .2011 | .4047 | .2993 | -.1517 | -.1804 | -.1560 | | -.1187 | -.1177 |
| 40.000 | -.1275 | .0761 | .4261 | .2568 | -.2541 | -.1504 | -.1797 | | -.1203 | -.1210 |
| 70.000 | .0037 | -.0844 | -.0272 | .1871 | .0000 | .0609 | .0288 | | | |
| 90.000 | .0076 | -.0399 | .0664 | .1916 | .0739 | .0143 | .0002 | | | |
| 105.000 | | | .0000 | .1524 | -.0095 | -.0447 | -.0469 | | | |
| 110.000 | | | | | | | | -.1398 | | |
| 120.000 | -.0291 | .0053 | .1987 | .0319 | .0407 | -.1076 | -.2103 | -.1706 | | |
| 135.000 | | | .2510 | .2660 | .1042 | .0219 | -.0277 | | | |
| 150.000 | -.0577 | -.0197 | .2620 | .2921 | .1231 | .0580 | .0205 | | | |
| 165.000 | -.0724 | | .2659 | | .2771 | .1090 | -.1547 | | | |
| 180.000 | -.0821 | -.0288 | .2701 | .3201 | | | | | | |
| 320.000 | .0629 | .2266 | .3298 | -.0412 | -.2006 | -.1820 | -.2966 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RE79391

ALPHAO( 3) = -.028 BETAO ( 1) = -5.891

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .251. | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3200 | 1.0897 | .5902 | .2424 | .1545 | .9801 | | -.0746 | | -.1663 | -.0711 | -.1617 | -.0889 | -.0847 | -.0241 |
| 20.000 | | | .7066 | .3563 | .1517 | .7942 | | -.2849 | | -.0961 | | | | | |
| 40.000 | | | .8857 | .5308 | .3382 | .4214 | | .0124 | | -.2100 | -.0186 | -.0855 | .1415 | -.0622 | .0692 |
| 55.000 | | | .9404 | .6790 | .5137 | .3240 | | .2009 | | .0565 | | | | | |
| 70.000 | | | .9249 | .6906 | .5077 | .3284 | | .2382 | | .1644 | -.1322 | -.0605 | -.0539 | -.0237 | |
| 90.000 | | 1.0182 | .8721 | .6635 | .4899 | .3570 | | .2812 | | .0000 | -.0877 | -.1261 | -.1028 | -.0237 | |
| 120.000 | | | .7753 | .5886 | .4401 | .3922 | | .6047 | | .2591 | -.0304 | -.2440 | -.1715 | -.0755 | |
| 140.000 | | | | | | | | | | .2349 | | | | | |
| 150.000 | | | .6519 | .4788 | .4030 | .3712 | | | | .0679 | -.2818 | -.2383 | -.1601 | -.0990 | |
| 151.000 | | | | | | | | | .7857 | | | | | | |
| 156.000 | | | | | | | | .9510 | | | | | | | |
| 162.000 | | | | | | | | | .8319 | | | | | | |
| 165.000 | | | | | | | | | | -.1284 | -.2517 | -.1951 | -.1445 | -.1172 | |
| 169.000 | | | | | | | | 1.0408 | | | | | | | |
| 174.000 | | | | | | | .9043 | | | | | | | | |
| 180.000 | 1.3200 | .7816 | .5231 | .4325 | .3709 | .3385 | | .9402 | | -.2149 | -.2812 | -.1842 | -.1442 | -.1359 | |
| 305.000 | | | .4282 | .1491 | .1643 | .2919 | | -.0547 | | -.1694 | | | | | |
| 320.000 | | | .5035 | .1364 | .1628 | .3890 | | -.2789 | | -.2799 | -.1364 | -.1827 | -.1690 | .0556 | .1006 |
| 340.000 | | | .5734 | .1628 | .1513 | .6467 | | -.0771 | | -.3138 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0902 | .3885 | .6640 | .3835 | -.2049 | -.1341 | -.1918 | | -.0884 | -.1146 |
| 40.000 | .1477 | .2116 | .4159 | -.0019 | -.2517 | -.1487 | -.3212 | | -.0971 | -.0949 |
| 70.000 | .0197 | -.1010 | -.1039 | -.1322 | .0000 | .0228 | .0064 | | | |
| 90.000 | .0378 | -.0585 | -.0730 | .0962 | .0446 | -.0293 | -.0545 | | | |
| 105.000 | | | .0000 | .1909 | .0082 | -.0912 | -.1171 | | | |
| 110.000 | | | | | | | | -.1819 | | |
| 120.000 | -.0750 | -.0890 | .1413 | .2010 | .0894 | -.0532 | -.1171 | -.1368 | | |
| 135.000 | | | .2392 | .2244 | .0658 | -.0581 | .0320 | | | |
| 150.000 | -.0961 | -.0834 | .2411 | .2195 | -.0295 | .1665 | .0937 | | | |
| 165.000 | -.1138 | | .2301 | | .4132 | .3081 | -.1171 | | | |
| 180.000 | -.1402 | .0540 | .2149 | .2020 | | | | | | |
| 320.000 | -.1010 | .4150 | .6439 | .5011 | -.1848 | -.1291 | -.1799 | | | |

ARC97-018 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB39)

ALPHAO( 3) = -.024 BETAO ( 2) = -3.844

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1860 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3993 | 1.1400 | .5775 | .2023 | .1549 | .9594 | | -.0795 | | -.1939 | .0142 | -.1681 | -.0057 | -.0869 | -.0678 |
| 20.000 | | | .6638 | .3012 | .1314 | .7816 | | -.3029 | | -.1138 | | | | | |
| 40.000 | | | .8359 | .4519 | .2958 | .5543 | | -.0231 | | -.2517 | -.0605 | -.1135 | .0910 | -.0134 | -.0088 |
| 55.000 | | | .8600 | .5991 | .4608 | .2945 | | .1601 | | .0217 | | | | | |
| 70.000 | | | .8305 | .5943 | .4481 | .2824 | | .2064 | | .1325 | -.1655 | -.1385 | -.1191 | -.0389 | |
| 90.000 | | .9078 | .7871 | .5861 | .4328 | .3129 | | .2562 | | .0000 | -.1221 | -.1639 | -.1417 | -.0334 | |
| 120.000 | | | .7231 | .5505 | .4153 | .3782 | | .5686 | | .2176 | -.0724 | -.2741 | -.2024 | -.0745 | |
| 140.000 | | | | | | | | | | .1828 | | | | | |
| 150.000 | | | .8280 | .4751 | .3994 | .3718 | | | | -.0153 | -.2868 | -.2371 | -.1534 | -.1056 | |
| 151.000 | | | | | | | | | .7458 | | | | | | |
| 158.000 | | | | | | | | .9870 | | | | | | | |
| 162.000 | | | | | | | | | .7938 | | | | | | |
| 165.000 | | | | | | | | | | -.1305 | -.2540 | -.1910 | -.1420 | .1173 | |
| 169.000 | | | | | | | | 1.0177 | | | | | | | |
| 174.000 | | | | | | | 1.0389 | | | | | | | | |
| 180.000 | 1.3993 | .7598 | .5248 | .4439 | .3858 | .3495 | | .9438 | | -.2245 | -.2816 | -.1649 | -.1420 | -.1328 | |
| 305.000 | | | .5058 | .2350 | .1797 | .3024 | | -.0343 | | -.1453 | | | | | |
| 320.000 | | | .5565 | .1778 | .1540 | .4160 | | -.2349 | | -.2502 | -.0936 | -.1722 | -.1085 | .0601 | .1128 |
| 340.000 | | | .5864 | .1524 | .1387 | .8439 | | -.1068 | | -.2996 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0298 | .3347 | .5953 | .3878 | -.1332 | -.1768 | -.1420 | | -.1018 | -.0950 |
| 40.000 | .0679 | .1769 | .3561 | .0022 | -.2113 | -.2566 | -.3340 | | -.1112 | -.0740 |
| 70.000 | -.0068 | -.1117 | -.1233 | -.0417 | .0000 | -.0043 | -.0294 | | | |
| 90.000 | .0127 | -.0721 | -.0810 | .1043 | -.0008 | -.0528 | -.0677 | | | |
| 105.000 | | | .0000 | .1552 | -.0352 | -.1189 | -.1189 | | | |
| 110.000 | | | | | | | | -.1788 | | |
| 120.000 | -.0510 | -.0635 | .2032 | .1778 | .0666 | -.0797 | -.1176 | -.1530 | | |
| 135.000 | | | .2130 | .2321 | .0744 | -.0320 | .0108 | | | |
| 150.000 | -.0812 | -.0537 | .2208 | .2454 | .0621 | .1294 | .0640 | | | |
| 165.000 | -.0829 | | .2188 | | .3878 | .2461 | -.1241 | | | |
| 180.000 | -.0935 | -.0449 | .2188 | .2838 | | | | | | |
| 320.000 | -.0250 | .3457 | .5635 | .3920 | -.2055 | -.1092 | -.1796 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET839)

ALPHAO( 3) = -.022 BETAO ( 3) = .347

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5255 | 1.1544 | .5592 | .1507 | .1254 | .8424 | | -.1584 | | -.1691 | -.0117 | -.1262 | -.0190 | .0485 | .0557 |
| 20.000 | | | .5895 | .1875 | .1308 | .5535 | | -.2023 | | -.1868 | | | | | |
| 40.000 | | | .6867 | .2881 | .1374 | .4042 | | -.1235 | | -.3125 | -.0645 | -.0517 | .0555 | -.1097 | -.0384 |
| 55.000 | | | .7000 | .3936 | .2872 | .2292 | | .0798 | | -.0503 | | | | | |
| 70.000 | | | .6801 | .4107 | .3100 | .1944 | | .1446 | | .0785 | -.2186 | -.2291 | -.1705 | -.0840 | |
| 90.000 | | .7897 | .6766 | .4420 | .3188 | .2219 | | .2134 | | .0000 | -.1840 | -.2301 | -.2146 | -.0634 | |
| 120.000 | | | .6293 | .4629 | .3488 | .3114 | | .5161 | | .1334 | -.1438 | -.3328 | -.2174 | -.0916 | |
| 140.000 | | | | | | | | | | .0436 | | | | | |
| 150.000 | | | .5873 | .4588 | .3899 | .3478 | | | | -.1140 | -.2841 | -.2019 | -.1534 | -.1377 | |
| 151.000 | | | | | | | | | .6744 | | | | | | |
| 156.000 | | | | | | | | .9243 | | | | | | | |
| 162.000 | | | | | | | | | .7385 | | | | | | |
| 165.000 | | | | | | | | | | -.1290 | -.2764 | -.1692 | -.1394 | -.1342 | |
| 169.000 | | | | | | | | 1.0201 | | | | | | | |
| 174.000 | | | | | | | 1.0190 | | | | | | | | |
| 180.000 | 1.5255 | .7357 | .5421 | .4686 | .4155 | .3655 | | 1.0036 | | -.2659 | -.2751 | -.1227 | -.1328 | -.1313 | |
| 305.000 | | | .6750 | .4113 | .3741 | .3143 | | .0479 | | -.0584 | | | | | |
| 320.000 | | | .6551 | .3745 | .2200 | .4836 | | -.1355 | | -.2921 | -.0386 | -.1509 | -.0390 | .0473 | -.0055 |
| 340.000 | | | .6196 | ..568 | .1323 | .7089 | | -.3344 | | -.1249 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1088 | .2634 | .3856 | .2918 | -.1701 | -.1766 | -.1538 | | -.1206 | -.1174 |
| 40.000 | .0799 | .2232 | .3376 | .1076 | -.2420 | -.2462 | -.2820 | | -.1051 | -.1196 |
| 70.000 | -.0210 | -.1259 | -.1114 | .0479 | .0000 | -.0321 | -.0589 | | | |
| 90.000 | -.0051 | -.0756 | .0463 | .0892 | -.0499 | -.0477 | -.0699 | | | |
| 105.000 | | | .0000 | .0970 | -.1085 | -.1367 | -.1170 | | | |
| 110.000 | | | | | | | | -.1855 | | |
| 120.000 | -.0304 | -.0157 | .2041 | .1372 | .0599 | -.1047 | -.1809 | -.1835 | | |
| 135.000 | | | .2057 | .2346 | .0890 | -.0079 | -.0370 | | | |
| 150.000 | -.0517 | -.0057 | .2415 | .2870 | .0994 | .0740 | .0170 | | | |
| 165.000 | -.0543 | | .2579 | | .3180 | .1446 | -.1290 | | | |
| 180.000 | -.0559 | -.0122 | .2609 | .3776 | | | | | | |
| 320.000 | .0369 | .2960 | .4418 | .1980 | -.2245 | -.1790 | -.2365 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB39)

ALPHAO( 3) = .001 BETAO ( 4) = 3.898

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4233 | 1.0980 | .5927 | .2043 | .1304 | 1.0129 | | -.1340 | | -.1792 | -.1177 | -.1977 | -.1058 | .0504 | -.0888 |
| 20.000 | | | .5434 | .1672 | .1405 | .6320 | | -.1951 | | -.3131 | | | | | |
| 40.000 | | | .5223 | .2008 | .1075 | .3940 | | -.2147 | | -.2436 | -.0895 | -.1362 | .0104 | -.1721 | -.1085 |
| 55.000 | | | .5049 | .2443 | .1736 | .2735 | | .0085 | | -.1104 | | | | | |
| 70.000 | | | .4986 | .2621 | .1894 | .1781 | | .1014 | | .0263 | -.2687 | -.2975 | -.2381 | -.0769 | |
| 90.000 | | .5523 | .5188 | .3018 | .2053 | .1715 | | .2219 | | .0000 | -.2406 | -.2927 | -.2806 | -.0829 | |
| 120.000 | | | .5248 | .3694 | .2621 | .2336 | | .4330 | | .0583 | -.2018 | -.3809 | -.2441 | -.1832 | |
| 140.000 | | | | | | | | | | -.0982 | | | | | |
| 150.000 | | | .5182 | .4195 | .3417 | .2843 | | | | -.1634 | -.2927 | -.1851 | -.1730 | -.1740 | |
| 151.000 | | | | | | | | | .5634 | | | | | | |
| 156.000 | | | | | | | | .8352 | | | | | | | |
| 162.000 | | | | | | | | | .6561 | | | | | | |
| 165.000 | | | | | | | | | | -.1455 | -.2937 | -.1397 | -.1499 | -.1497 | |
| 169.000 | | | | | | | | .9675 | | | | | | | |
| 174.000 | | | | | | | .9016 | | | | | | | | |
| 180.000 | 1.4233 | .6991 | .5359 | .4532 | .3955 | .3413 | | .9789 | | -.2278 | -.2713 | -.1746 | -.1432 | -.1348 | |
| 305.000 | | | .8637 | .6131 | .5008 | .3315 | | .1169 | | .0158 | | | | | |
| 320.000 | | | .8178 | .4363 | .3173 | .5410 | | -.0343 | | -.2236 | .0590 | -.1584 | -.0835 | -.1649 | -.0175 |
| 340.000 | | | .7017 | .2583 | .1553 | .7809 | | -.3464 | | -.1100 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1880 | .2789 | .4535 | .3744 | -.1653 | -.1855 | -.1543 | | -.1078 | -.1068 |
| 40.000 | -.1027 | .2064 | .5196 | .3731 | -.2835 | -.1735 | -.1996 | | -.1084 | -.1139 |
| 70.000 | -.0175 | -.1043 | .0385 | .1549 | .0000 | .0145 | -.0247 | | | |
| 90.000 | -.0075 | -.0586 | .1238 | .1607 | .0379 | -.0108 | -.0380 | | | |
| 105.000 | | | .0000 | .1847 | -.0303 | -.0680 | -.0800 | | | |
| 110.000 | | | | | | | | -.1873 | | |
| 120.000 | -.0334 | .0054 | .2035 | .1021 | .0544 | -.1004 | -.1921 | -.1530 | | |
| 135.000 | | | .2291 | .2340 | .1098 | -.0057 | -.0499 | | | |
| 150.000 | -.0781 | -.0050 | .2304 | .2288 | .1355 | .0425 | -.0131 | | | |
| 165.000 | -.1034 | | .2266 | | .1987 | .0969 | -.1427 | | | |
| 180.000 | -.1286 | -.0593 | .2236 | .2580 | | | | | | |
| 320.000 | .1312 | .2969 | .3637 | .0067 | -.2017 | -.1886 | -.3185 | | | |

APC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET839)

ALPHA0( 3) = .014 BETA0 ( 5) = 6.597

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3977 | 1.0566 | .5756 | .1967 | .0827 | .9489 | | -.1409 | | -.1622 | -.2090 | -.1787 | -.1973 | .0384 | -.1052 |
| 20.000 | | | .4921 | .1362 | .1024 | .5791 | | -.2112 | | -.2973 | | | | | |
| 40.000 | | | .4294 | .1419 | .0935 | .3321 | | -.2590 | | -.2438 | -.1432 | -.1458 | -.0432 | -.1027 | .0457 |
| 55.000 | | | .4029 | .1587 | .0998 | .2316 | | -.0226 | | -.1277 | | | | | |
| 70.000 | | | .4193 | .1745 | .1255 | .1380 | | .0849 | | .0024 | -.2856 | -.3201 | -.2502 | -.0934 | |
| 90.000 | | .4423 | .4495 | .2160 | .1362 | .1377 | | .2165 | | .0000 | -.2582 | -.3103 | -.2926 | -.0875 | |
| 120.000 | | | .4694 | .3071 | .1895 | .1839 | | .3914 | | .0184 | -.2192 | -.3923 | -.2644 | -.2128 | |
| 140.000 | | | | | | | | | | -.1579 | | | | | |
| 150.000 | | | .4713 | .3793 | .2920 | .2449 | | | | -.1875 | -.2981 | -.1660 | -.1818 | -.1815 | |
| 151.000 | | | | | | | | | .4871 | | | | | | |
| 156.000 | | | | | | | | .8065 | | | | | | | |
| 162.000 | | | | | | | | | .5934 | | | | | | |
| 165.000 | | | | | | | | | | -.1828 | -.2943 | -.1571 | -.1553 | -.1553 | |
| 169.000 | | | | | | | | .9066 | | | | | | | |
| 174.000 | | | | | | | .9657 | | | | | | | | |
| 180.000 | 1.3977 | .6743 | .5161 | .4299 | .3691 | .3103 | | .8987 | | -.2314 | -.2684 | -.1863 | -.1442 | -.1359 | |
| 305.000 | | | .9580 | .7043 | .5664 | .3467 | | .1578 | | .0468 | | | | | |
| 320.000 | | | .8637 | .4903 | .3365 | .4106 | | .0014 | | -.1839 | .1197 | -.1128 | .0087 | -.1217 | .0350 |
| 340.000 | | | .7097 | .2739 | .1478 | .7997 | | -.3277 | | -.0895 | | | | | |
| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 | | | | | |
| PHI | | | | | | | | | | | | | | | |
| .000 | .1703 | .3073 | .4633 | .3786 | -.1711 | -.1896 | -.1595 | | -.1152 | -.1145 | | | | | |
| 20.000 | -.1207 | .2008 | .5696 | .4594 | -.2828 | -.1679 | -.1827 | | -.1201 | -.1230 | | | | | |
| 40.000 | .0480 | -.0405 | -.0333 | .1035 | .0000 | -.0155 | -.0588 | | | | | | | | |
| 90.000 | .0699 | .0163 | .0301 | .1569 | .0036 | -.0563 | -.0843 | | | | | | | | |
| 105.000 | | | .0000 | .2619 | -.1028 | -.1164 | -.1153 | | | | | | | | |
| 110.000 | | | | | | | | -. 572 | | | | | | | |
| 120.000 | -.0079 | .0521 | .1824 | .2551 | .0007 | -.1172 | -.2098 | -.1847 | | | | | | | |
| 135.000 | | | .1992 | .2099 | .0764 | -.0289 | -.0914 | | | | | | | | |
| 150.000 | -.0170 | .1420 | .1805 | .2115 | .1084 | -.0078 | -.0666 | | | | | | | | |
| 165.000 | -.0878 | | .1721 | | .1459 | .0435 | -.1669 | | | | | | | | |
| 180.000 | -.1618 | .1210 | .1908 | .1501 | | | | | | | | | | | |
| 320.000 | .1815 | .3236 | .3792 | -.0349 | -.2093 | -.1950 | -.3418 | | | | | | | | |

ARC97-019 1AB1 LVAP(ALLML SEALED) ORB. FUSELAGE (RET839)

ALPHA0( 4) = 3.553 BETA0 ( 1) = -3.877

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5033 | 1.1608 | .5438 | .1093 | .0982 | .7070 | | -.1278 | | -.1475 | .0433 | -.1596 | -.1570 | .0371 | .0107 |
| 20.000 | | | .6378 | .2125 | .0783 | .6135 | | -.3417 | | -.0769 | | | | | |
| 40.000 | | | .8259 | .4081 | .2369 | .2566 | | -.0281 | | -.1653 | -.0967 | -.1053 | .0272 | .0545 | .0779 |
| 55.000 | | | .8689 | .5731 | .4303 | .1948 | | .1155 | | .0517 | | | | | |
| 70.000 | | | .8275 | .5724 | .4281 | .2227 | | .1537 | | .0719 | -.1251 | -.0944 | -.1411 | -.0780 | |
| 90.000 | | .9298 | .7735 | .5534 | .3999 | .2582 | | .1690 | | .0000 | -.1107 | -.1414 | -.1614 | -.0869 | |
| 120.000 | | | .6369 | .4588 | .3199 | .2788 | | .4669 | | .1791 | -.1011 | -.2673 | -.2502 | -.1573 | |
| 140.000 | | | | | | | | | | .1423 | | | | | |
| 150.000 | | | .5090 | .3591 | .3070 | .2756 | | | | -.0561 | -.3302 | -.2895 | -.1871 | -.1526 | |
| 151.000 | | | | | | | | | .6908 | | | | | | |
| 155.000 | | | | | | | | .9284 | | | | | | | |
| 162.000 | | | | | | | | | .7215 | | | | | | |
| 165.000 | | | | | | | | | | -.1766 | -.2980 | -.2413 | -.1725 | -.1581 | |
| 169.000 | | | | | | | | .9505 | | | | | | | |
| 174.000 | | | | | | | 1.0190 | | | | | | | | |
| 180.000 | 1.5033 | .5984 | .4103 | .3467 | .2987 | .2651 | | .8502 | | -.2635 | -.3210 | -.2093 | -.1823 | -.1617 | |
| 305.000 | | | .4630 | .1755 | .1419 | .2347 | | -.0533 | | -.1670 | | | | | |
| 320.000 | | | .5224 | .1102 | .0985 | .3291 | | -.2409 | | -.1833 | -.1136 | -.2029 | -.1345 | .0408 | .0969 |
| 340.000 | | | .5557 | .0634 | .0871 | .4583 | | -.1371 | | -.0855 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .2000 | .4054 | .5783 | .4398 | -.1836 | -.2069 | -.1535 | | -.0929 | -.0971 |
| 40.000 | .1639 | .2531 | .3942 | .0139 | -.1852 | -.1726 | -.2726 | | -.0465 | -.0755 |
| 70.000 | -.0378 | -.1407 | -.1635 | -.1635 | .0000 | -.0551 | -.0822 | | | |
| 90.000 | -.0210 | -.1002 | -.1350 | .0473 | -.0343 | -.0855 | -.1115 | | | |
| 105.000 | | | .0000 | .0996 | -.0444 | -.1493 | -.1693 | | | |
| 110.000 | | | | | | | | -.2171 | | |
| 120.000 | -.1365 | -.1405 | .1694 | .1313 | .0592 | -.1006 | -.1632 | -.1790 | | |
| 135.000 | | | .2085 | .1850 | .0327 | -.1115 | -.0825 | | | |
| 150.000 | -.1109 | -.0453 | .1955 | .1850 | -.1379 | .0541 | .0389 | | | |
| 165.000 | -.1083 | | .1787 | | .2768 | .1709 | -.1357 | | | |
| 180.000 | -.0860 | .0434 | .1901 | .2031 | | | | | | |
| 320.000 | .1842 | .4659 | .6365 | .4987 | -.1849 | -.1054 | -.1493 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB39)

ALPHAO( 4) = 3.564 BETAO ( 2) = .361

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1860 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4995 | 1.1764 | .5464 | .1007 | .0912 | .8505 | | -.1559 | | -.1530 | .0146 | -.1376 | -.1010 | .0782 | .1000 |
| 20.000 | | | .5838 | .1459 | .0912 | .5668 | | -.2370 | | -.1593 | | | | | |
| 40.000 | | | .6890 | .2733 | .1272 | .3885 | | -.1296 | | -.2885 | -.1299 | -.0677 | .0014 | .0093 | .0070 |
| 55.000 | | | .6877 | .3877 | .2852 | .2038 | | .0495 | | -.0658 | | | | | |
| 70.000 | | | .6594 | .3956 | .2944 | .1549 | | .1009 | | -.0020 | -.1969 | -.1915 | -.1911 | -.1263 | |
| 90.000 | | .7472 | .6430 | .4073 | .2855 | .1839 | | .1381 | | .0000 | -.2027 | -.2094 | -.2284 | -.1007 | |
| 120.000 | | | .5681 | .3962 | .2783 | .2540 | | .4633 | | .1110 | -.1631 | -.3343 | -.2448 | -.1424 | |
| 140.000 | | | | | | | | | | .0369 | | | | | |
| 150.000 | | | .4963 | .3690 | .3073 | .2717 | | | | -.1424 | -.3242 | -.2543 | -.1904 | -.1539 | |
| 151.000 | | | | | | | | | .6187 | | | | | | |
| 158.000 | | | | | | | | .8739 | | | | | | | |
| 162.000 | | | | | | | | | .6888 | | | | | | |
| 165.000 | | | | | | | | | | -.1717 | -.3172 | -.2186 | -.1904 | -.1455 | |
| 169.000 | | | | | | | | .9366 | | | | | | | |
| 174.000 | | | | | | | .9824 | | | | | | | | |
| 180.000 | 1.4995 | .5833 | .4476 | .3788 | .3298 | .2887 | | .9149 | | -.3003 | -.3143 | -.1743 | -.1854 | -.1413 | |
| 305.000 | | | .8823 | .3946 | .3560 | .2802 | | .0065 | | -.0958 | | | | | |
| 320.000 | | | .6552 | .2819 | .2142 | .4386 | | -.1445 | | -.2915 | -.0042 | -.2100 | -.0504 | .1202 | .0923 |
| 340.000 | | | .6137 | .1244 | .1044 | .6956 | | -.3618 | | -.1328 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .2130 | .3662 | .4763 | .3622 | -.1218 | -.1493 | -.1374 | | -.1054 | -.1037 |
| 40.000 | .1854 | .3158 | .4117 | .1284 | -.2152 | -.1855 | -.2241 | | -.0947 | -.1095 |
| 70.000 | -.0353 | -.1485 | -.1612 | -.0450 | .0000 | -.0584 | -.1016 | | | |
| 90.000 | -.0211 | -.0955 | -.1133 | .0673 | -.0597 | -.1108 | -.1293 | | | |
| 105.000 | | | .0000 | .1196 | -.0972 | -.1903 | -.1925 | | | |
| 110.000 | | | | | | | | -.1819 | | |
| 120.000 | -.0562 | -.0372 | .1678 | .1596 | -.0074 | -.1261 | -.1786 | -.1785 | | |
| 135.000 | | | .1797 | .2194 | .0566 | -.0417 | -.0758 | | | |
| 150.000 | -.0590 | .0482 | .1742 | .2313 | .1257 | .0351 | -.0326 | | | |
| 165.000 | -.0556 | | .1872 | | .2307 | .0948 | -.1303 | | | |
| 180.000 | -.0575 | .0126 | .2059 | .2914 | | | | | | |
| 320.000 | .2069 | .3759 | .4892 | .2303 | -.2068 | -.1442 | -.1938 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RET839)

ALPHAO( 4) = 3.575 BETAO ( 3) = 3.908

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4697 | 1.1606 | .5448 | .0944 | .0481 | .9660 | | -.1768 | | -.1746 | -.1220 | -.1485 | -.1315 | .0149 | .1542 |
| 20.000 | | | .4949 | .0764 | .0516 | .5786 | | -.2348 | | -.2971 | | | | | |
| 40.000 | | | .4792 | .1245 | .0465 | .3521 | | -.2247 | | -.2797 | -.0574 | -.1562 | .0006 | .0491 | .1043 |
| 55.000 | | | .4501 | .1837 | .1235 | .2319 | | -.0230 | | -.1519 | | | | | |
| 70.000 | | | .4489 | .2122 | .1444 | .1295 | | .0548 | | -.0259 | -.2710 | -.2793 | -.2576 | -.0922 | |
| 90.000 | | .4959 | .4741 | .2511 | .1590 | .1232 | | .1155 | | .0000 | -.2540 | -.2909 | -.2785 | -.0947 | |
| 120.000 | | | .4561 | .3030 | .2022 | .1867 | | .3934 | | .0407 | -.2289 | -.3869 | -.2641 | -.1556 | |
| 140.000 | | | | | | | | | | -.1134 | | | | | |
| 150.000 | | | .4236 | .3280 | .2604 | .2165 | | | | -.2000 | -.3308 | -.2399 | -.2155 | -.1824 | |
| 151.000 | | | | | | | | | .5124 | | | | | | |
| 156.000 | | | | | | | | .7641 | | | | | | | |
| 162.000 | | | | | | | | | .5939 | | | | | | |
| 165.000 | | | | | | | | | | -.1930 | -.3298 | -.1809 | -.1974 | -.1704 | |
| 169.000 | | | | | | | | .9034 | | | | | | | |
| 174.000 | | | | | | | .8537 | | | | | | | | |
| 180.000 | 1.4687 | .5366 | .4230 | .3578 | .3031 | .2503 | | .8784 | | -.2729 | -.3157 | -.2221 | -.1866 | -.1691 | |
| 305.000 | | | .8937 | .5933 | .4831 | .2667 | | .0826 | | .0298 | | | | | |
| 320.000 | | | .8080 | .3711 | .2626 | .3185 | | -.0487 | | -.1236 | .0583 | -.1797 | -.0532 | -.0951 | .0299 |
| 340.000 | | | .6696 | .1549 | .0602 | .7487 | | -.3544 | | -.0878 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .2025 | .3520 | .4965 | .3955 | -.1162 | -.1486 | -.1372 | | -.0900 | -.0990 |
| 40.000 | .0353 | .3677 | .5914 | .4515 | -.2673 | -.1094 | -.1553 | | -.1026 | -.1090 |
| 70.000 | -.0291 | -.0829 | -.0634 | .0472 | .0000 | -.0176 | -.0587 | | | |
| 90.000 | -.0009 | -.0433 | .0304 | .1308 | -.0134 | -.0539 | -.0868 | | | |
| 105.000 | | | .0000 | .1826 | -.0731 | -.1262 | -.1227 | | | |
| 110.000 | | | | | | | | -.2022 | | |
| 120.000 | -.0236 | .0696 | .2130 | .1745 | .0343 | -.1227 | -.2028 | -.1883 | | |
| 135.000 | | | .2143 | .2105 | .0641 | -.0413 | -.0852 | | | |
| 150.000 | -.0546 | .1201 | .1835 | .1642 | .0858 | .0133 | -.0468 | | | |
| 165.000 | -.0595 | | .1787 | | .1515 | .0686 | -.1731 | | | |
| 180.000 | -.1122 | .1168 | .1761 | .1839 | | | | | | |
| 320.000 | .2209 | .3334 | .3777 | .0213 | -.1622 | -.1647 | -.2529 | | | |

ARC97-019 IA81 LVAP(ALL HL SEALED) ORB FUSELAGE (RET839)

ALPHA0( S) = 6.255 BETA0 ( ) = .393

SECTION ( )ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4879 | 1.1833 | .5234 | .0741 | .0672 | .0611 | | -.1372 | | -.1486 | -.0038 | -.1635 | -.0435 | .0927 | .1328 |
| 20.000 | | | .5565 | .1180 | .0640 | .5672 | | -.2558 | | -.1555 | | | | | |
| 40.000 | | | .6723 | .2507 | .1215 | .3806 | | -.1334 | | -.2946 | -.1658 | -.0759 | .0255 | .0507 | .0048 |
| 55.000 | | | .6786 | .3847 | .2871 | .1911 | | .0473 | | -.0656 | | | | | |
| 70.000 | | | .6499 | .3885 | .2795 | .1422 | | .0876 | | -.0104 | -.2030 | -.2050 | -.1914 | -.1228 | |
| 90.000 | | .7261 | .6238 | .3901 | .2697 | .1693 | | .1172 | | .0000 | -.1865 | -.2259 | -.2445 | -.1079 | |
| 120.000 | | | .5407 | .3635 | .2475 | .2270 | | .4328 | | .1058 | -.1718 | -.3280 | -.2812 | -.1219 | |
| 140.000 | | | | | | | | | | .0354 | | | | | |
| 150.000 | | | .4520 | .3272 | .2746 | .2384 | | | | -.1584 | -.3433 | -.2752 | -.2053 | -.1633 | |
| 151.000 | | | | | | | | | .6056 | | | | | | |
| 156.000 | | | | | | | | .8674 | | | | | | | |
| 162.000 | | | | | | | | | .6490 | | | | | | |
| 165.000 | | | | | | | | | | -.1916 | -.3328 | -.2382 | -.2059 | -.1604 | |
| 169.000 | | | | | | | | .9253 | | | | | | | |
| 174.000 | | | | | | | .9387 | | | | | | | | |
| 180.000 | 1.4879 | .5385 | .3988 | .3401 | .2926 | .2485 | | .8850 | | -.3191 | -.3299 | -.1974 | -.2021 | -.1575 | |
| 305.000 | | | .6955 | .3926 | .3405 | .2649 | | -.0039 | | -.0653 | | | | | |
| 320.000 | | | .6760 | .2419 | .1873 | .4131 | | -.1375 | | -.2534 | -.0128 | -.2334 | -.0318 | .1395 | .1662 |
| 340.000 | | | .6033 | .0947 | .0795 | .6748 | | -.3747 | | -.1176 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .2605 | .4063 | .5174 | .3882 | -.1678 | -.1594 | -.1489 | | -.1139 | -.1135 |
| 40.000 | .2259 | .3492 | .4483 | .1613 | -.2556 | -.1597 | -.1859 | | -.1074 | -.1004 |
| 70.000 | -.0491 | -.1630 | -.1750 | -.0634 | .0000 | -.0783 | -.1231 | | | |
| 90.000 | -.0323 | -.1155 | -.1339 | .0518 | -.0774 | -.1271 | -.1447 | | | |
| 105.000 | | | .0000 | .1048 | -.1026 | -.1952 | -.2123 | | | |
| 110.000 | | | | | | | | -.1634 | | |
| 120.000 | -.0817 | -.0508 | .1642 | .1373 | .0111 | -.1418 | -.1904 | -.1692 | | |
| 135.000 | | | .1739 | .2075 | .0266 | -.0732 | -.0951 | | | |
| 150.000 | -.0459 | .0505 | .1697 | .2315 | .0976 | .0203 | -.0439 | | | |
| 165.000 | -.0394 | | .1861 | | .2115 | .0772 | -.1315 | | | |
| 180.000 | -.0398 | .0440 | .1919 | .2069 | | | | | | |
| 320.000 | .2461 | .3992 | .4993 | .2418 | -.1513 | -.1785 | -.2123 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB40) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.000 RN/FT = 2.500
ELV-IB = .000 ELV-OB = .000
RUDDER = .000 SPOSRK = .000

ALPHA0( 1) = -6.299 BETA0 ( 1) = .072

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1860 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5719 | .8497 | .2199 | .6602 | .3757 | .6163 | | .0647 | | -.0379 | .2254 | -.0670 | -.0589 | .0541 | -.0058 |
| 20.000 | | | .2447 | .5666 | .4141 | .5001 | | .0610 | | -.0144 | | | | | |
| 40.000 | | | .3937 | .3866 | .4905 | .5259 | | .1460 | | -.0795 | .0457 | .0009 | -.0093 | .0332 | .0406 |
| 55.000 | | | .5055 | .3579 | .5244 | .3321 | | .3163 | | .1608 | | | | | |
| 70.000 | | | .5726 | .3102 | .3292 | .3913 | | .3536 | | .2548 | .0100 | -.0193 | -.0138 | -.0306 | |
| 90.000 | | .7954 | .6281 | .3895 | .2665 | .3076 | | .3414 | | .0000 | .0463 | -.0238 | -.0579 | -.0232 | |
| 120.000 | | | .6946 | .5231 | .3859 | .3334 | | .5888 | | .3477 | .0691 | -.1259 | -.0389 | -.0071 | |
| 140.000 | | | | | | | | | | .2121 | | | | | |
| 150.000 | | | .7020 | .5663 | .4895 | .4251 | | | | .1250 | -.0774 | -.0212 | .0087 | .0166 | |
| 151.000 | | | | | | | | | .9238 | | | | | | |
| 155.000 | | | | | | | | 1.2419 | | | | | | | |
| 162.000 | | | | | | | | | 1.0443 | | | | | | |
| 165.000 | | | | | | | | | | .1091 | -.1015 | .0055 | .0332 | .0294 | |
| 169.000 | | | | | | | | 1.2657 | | | | | | | |
| 174.000 | | | | | | | 1.0323 | | | | | | | | |
| 180.000 | 1.5719 | 1.0325 | .6699 | .5657 | .5133 | .4741 | | 1.2907 | | -.0313 | -.0667 | .0004 | .0429 | .0320 | |
| 305.000 | | | .4682 | .3454 | .5017 | .3978 | | .2651 | | .1311 | | | | | |
| 320.000 | | | .3163 | .5492 | .4634 | .4985 | | .1015 | | .0171 | .1633 | -.0083 | -.0457 | -.0097 | -.0045 |
| 340.000 | | | .2492 | .6682 | .3826 | .4348 | | .0436 | | .0295 | | | | | |

| X/LB | .0520 | .7280 | .7790 | .8210 | .8790 | .9210 | .9800 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0107 | .2118 | .3748 | .3896 | -.1886 | -.1656 | -.1772 | | -.1213 | -.1259 |
| 40.000 | -.0771 | .1070 | .3068 | -.0499 | -.2272 | -.1303 | -.2090 | | -.1278 | -.1177 |
| 70.000 | .0452 | -.0252 | -.0282 | .0955 | .0000 | .0495 | .0233 | | | |
| 90.000 | .0498 | .0221 | -.0124 | .1518 | .0432 | .0314 | .0157 | | | |
| 105.000 | | | .0000 | .1676 | -.0039 | -.0584 | -.0648 | | | |
| 110.000 | | | | | | | | -.0934 | | |
| 120.000 | .0209 | .0488 | .1136 | .1897 | .1653 | .0147 | -.0628 | -.1312 | | |
| 135.000 | | | .1660 | 3170 | .1620 | .0755 | .0689 | | | |
| 150.000 | .0070 | .0162 | .1034 | .3236 | .1673 | .1734 | .1429 | | | |
| 165.000 | .0083 | | .0301 | | .4034 | .2559 | -.1075 | | | |
| 180.000 | .0126 | .0113 | .0215 | .4037 | | | | | | |
| 320.000 | -.0354 | .1057 | .3817 | .0456 | -.1682 | -.1509 | -.2120 | | | |

ARC97-019 1AB1 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB40)

ALPHA0( 2) = -4.312 BETA0 ( 1) = -4.221

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5283 | .7086 | .3824 | .6047 | .2418 | .5359 | | .0399 | | .0239 | .1680 | -.0177 | .0160 | -.0172 | -.0056 |
| 20.000 | | | .3946 | .6613 | .3483 | .5068 | | -.0851 | | .0847 | | | | | |
| 40.000 | | | .4588 | .7005 | .5517 | .2855 | | .2215 | | -.0324 | .1034 | -.0415 | .0106 | .0984 | -.0192 |
| 55.000 | | | .5576 | .6972 | .6507 | .3992 | | .3604 | | .2099 | | | | | |
| 70.000 | | | .6650 | .5407 | .6025 | .4564 | | .3475 | | .2580 | .0368 | .0221 | .0164 | -.0269 | |
| 90.000 | | .9018 | .7134 | .4786 | .4945 | .4761 | | .3534 | | .0000 | .0721 | .0193 | -.0149 | -.0243 | |
| 120.000 | | | .7437 | .5543 | .4383 | .4903 | | .6234 | | .4309 | .1178 | -.0882 | -.0527 | -.0124 | |
| 140.000 | | | | | | | | | | .3919 | | | | | |
| 150.000 | | | .6953 | .5336 | .4574 | .4367 | | | | .2144 | -.0892 | -.0643 | -.0343 | -.0040 | |
| 151.000 | | | | | | | | | 1.0183 | | | | | | |
| 156.000 | | | | | | | | 1.1347 | | | | | | | |
| 162.000 | | | | | | | | | 1.1218 | | | | | | |
| 165.000 | | | | | | | | | | .0933 | -.0885 | -.0537 | -.0321 | -.0013 | |
| 169.000 | | | | | | | | 1.2470 | | | | | | | |
| 174.000 | | | | | | | 1.0455 | | | | | | | | |
| 180.000 | 1.5283 | .9502 | .5976 | .7893 | .4393 | .4005 | | 1.2180 | | -.0233 | -.1209 | -.0292 | -.0156 | -.0070 | |
| 305.000 | | | .3295 | .4094 | .3308 | .2460 | | .1439 | | .0398 | | | | | |
| 320.000 | | | .3654 | .5139 | .3048 | .2593 | | .0149 | | -.0262 | .0740 | -.0701 | -.0911 | -.0569 | -.0456 |
| 340.000 | | | .3832 | .5465 | .2398 | .3243 | | .0126 | | -.0589 | | | | | |

| X/LB | .0520 | .7980 | .7780 | .8210 | .8790 | .9210 | .9800 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0520 | .2240 | .4482 | .2785 | -.1872 | -.2678 | -.1357 | | -.0911 | -.1046 |
| 40.000 | -.1220 | .0809 | .2457 | -.0548 | -.2237 | -.0793 | -.2008 | | -.1516 | -.1467 |
| 70.000 | .0344 | -.0347 | -.0327 | .0253 | .0000 | .0443 | .0109 | | | |
| 90.000 | .0488 | .0172 | -.0221 | .1482 | .0645 | .0307 | .0013 | | | |
| 105.000 | | | .0009 | .1950 | .0489 | -.0353 | -.0595 | | | |
| 110.000 | | | | | | | | -.1007 | | |
| 120.000 | .0334 | .0308 | .0283 | .2377 | .1811 | .0320 | -.0429 | -.1077 | | |
| 135.000 | | | .1995 | .2695 | .1754 | .0402 | .0218 | | | |
| 150.000 | -.0056 | .0101 | .2129 | .2430 | .0337 | .1918 | .1713 | | | |
| 165.000 | -.0076 | | .1767 | | .4142 | .3356 | -.0463 | | | |
| 180.000 | -.0132 | -.0217 | .1467 | .2351 | | | | | | |
| 320.000 | .0109 | .0850 | .4012 | .2092 | -.1270 | -.1743 | -.1852 | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB40)

ALPHAO( 2) = -4.288 BETAO ( 2) = .038

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5330 | .8273 | .3536 | .7126 | .3129 | .5146 | | .0387 | | -.0566 | .1966 | -.0811 | -.0711 | .0277 | -.0058 |
| 20.000 | | | .3162 | .7108 | .3285 | .4178 | | .0314 | | -.0327 | | | | | |
| 40.000 | | | .3752 | .6760 | .4308 | .4447 | | .1372 | | -.0893 | .0516 | -.0353 | -.0262 | .0283 | .0381 |
| 55.000 | | | .4781 | .4185 | .4744 | .3041 | | .2887 | | .1363 | | | | | |
| 70.000 | | | .5403 | .3599 | .4515 | .3622 | | .3097 | | .2104 | -.0092 | -.0347 | -.0285 | -.0601 | |
| 90.000 | | .7589 | .5964 | .3851 | .3188 | .3214 | | .3023 | | .0000 | .0323 | -.0338 | -.0704 | -.0469 | |
| 120.000 | | | .6403 | .4841 | .3528 | .3337 | | .3665 | | .3455 | .0525 | -.1263 | -.0837 | -.0230 | |
| 140.000 | | | | | | | | | | .2718 | | | | | |
| 150.000 | | | .6448 | .5087 | .4353 | .3793 | | | | .1136 | -.0928 | -.0507 | -.0152 | -.0045 | |
| 151.000 | | | | | | | | | .9018 | | | | | | |
| 155.000 | | | | | | | | 1.1160 | | | | | | | |
| 162.000 | | | | | | | | | 1.0243 | | | | | | |
| 165.000 | | | | | | | | | | .0839 | -.1170 | -.0159 | .0086 | .0064 | |
| 169.000 | | | | | | | | 1.2552 | | | | | | | |
| 174.000 | | | | | | | 1.0109 | | | | | | | | |
| 180.000 | 1.5330 | .9417 | .6035 | .5071 | .4580 | .4178 | | 1.2638 | | -.0507 | -.0895 | -.0114 | .0180 | .0084 | |
| 305.000 | | | .4536 | .4683 | .4598 | .3389 | | .2334 | | .1087 | | | | | |
| 320.000 | | | .3609 | .5482 | .4152 | .4188 | | .0806 | | -.0069 | .1411 | -.0320 | -.0637 | -.0.24 | -.0160 |
| 340.000 | | | .3871 | .6356 | .3360 | .3563 | | .0262 | | .0101 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9800 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0258 | .2508 | .3559 | .3357 | -.1691 | -.1665 | -.1871 | | -.1095 | -.1197 |
| 40.000 | -.0794 | .1405 | .2744 | -.0315 | -.2280 | -.1218 | -.2103 | | -.1184 | -.1115 |
| 70.000 | .0183 | -.0469 | -.0584 | .0570 | .0000 | .0249 | .0000 | | | |
| 90.000 | .0259 | .0015 | -.0395 | .1224 | .0235 | .0126 | -.0020 | | | |
| 105.000 | | | .0000 | .1357 | -.0192 | -.0692 | -.0783 | | | |
| 110.000 | | | | | | | | -.1088 | | |
| 120.000 | -.0071 | .0242 | .0862 | .1649 | .1526 | .0013 | -.0743 | -.1364 | | |
| 135.000 | | | .1403 | .2774 | .1417 | .0574 | .0386 | | | |
| 150.000 | -.0137 | -.0096 | .0869 | .2824 | .1440 | .1399 | .1195 | | | |
| 165.000 | -.0101 | | .0103 | | .3559 | .2214 | -.1149 | | | |
| 180.000 | -.0084 | -.0140 | -.0030 | .3598 | | | | | | |
| 320.000 | -.0385 | .1304 | .3877 | .0897 | -.1622 | -.1575 | -.2298 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB40)

ALPHAO( 2) = -4.260 BETAO ( 3) = 3.604

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5198 | .7969 | .3038 | .6662 | .2678 | .5295 | | -.0041 | | .0366 | .0867 | -.0239 | -.1482 | .0116 | -.0005 |
| 20.000 | | | .2966 | .6157 | .2541 | .2705 | | .0043 | | -.0768 | | | | | |
| 40.000 | | | .2649 | .5597 | .3139 | .2966 | | .0476 | | -.0354 | .0299 | -.0131 | -.0577 | .0238 | .0064 |
| 55.000 | | | .3362 | .3054 | .3379 | .1571 | | .1834 | | .0580 | | | | | |
| 70.000 | | | .3926 | .2521 | .2855 | .1633 | | .2555 | | .1543 | -.0497 | -.0876 | -.0719 | -.0709 | |
| 90.000 | | .6000 | .4454 | .2410 | .1831 | .1809 | | .1718 | | .0000 | -.0193 | -.0835 | -.1185 | -.0625 | |
| 120.000 | | | .5092 | .3674 | .2463 | .2110 | | .3994 | | .1928 | -.0523 | -.1676 | -.0771 | -.0864 | |
| 140.000 | | | | | | | | | | .0717 | | | | | |
| 150.000 | | | .5421 | .4477 | .3763 | .3156 | | | | .0394 | -.1486 | -.0635 | -.0201 | -.0240 | |
| 151.000 | | | | | | | | | .7064 | | | | | | |
| 156.000 | | | | | | | | .9096 | | | | | | | |
| 162.000 | | | | | | | | | .9434 | | | | | | |
| 165.000 | | | | | | | | | | .0185 | -.1150 | -.0476 | -.0146 | -.0137 | |
| 169.000 | | | | | | | | 1.1856 | | | | | | | |
| 174.000 | | | | | | | 1.0206 | | | | | | | | |
| 180.000 | 1.5198 | .8987 | .5797 | .4881 | .4351 | .3938 | | 1.2278 | | -.0412 | -.1241 | -.0305 | -.0195 | -.0094 | |
| 305.000 | | | .5704 | .4787 | .6700 | .4322 | | .3101 | | .1948 | | | | | |
| 320.000 | | | .3739 | .7462 | .5970 | .2855 | | .1747 | | -.0203 | .1644 | -.0460 | -.0596 | .0318 | -.0065 |
| 340.000 | | | .3156 | .7070 | .3747 | .5127 | | -.1107 | | .0867 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0953 | .1633 | .3003 | .3900 | -.1524 | -.1660 | -.1388 | | -.1024 | -.1050 |
| 40.000 | -.0292 | .0583 | .4191 | .0427 | -.2159 | -.1736 | -.1589 | | -.1093 | -.1106 |
| 70.000 | .0140 | -.0501 | -.0537 | .0620 | .0000 | -.0026 | -.0388 | | | |
| 90.000 | .0147 | -.0055 | -.0365 | .1256 | -.0172 | -.0224 | -.0362 | | | |
| 105.000 | | | .0000 | .0875 | -.0532 | -.1031 | -.1071 | | | |
| 110.000 | | | | | | | | -.1404 | | |
| 120.000 | -.0534 | -.0090 | .1269 | .0797 | .0609 | -.0523 | -.1286 | -.1820 | | |
| 135.000 | | | .1359 | .2223 | .0946 | -.0091 | -.0266 | | | |
| 150.000 | -.0339 | -.0418 | .0931 | .2418 | .1079 | .0397 | .0252 | | | |
| 165.000 | -.0289 | | .0709 | | .2272 | .1196 | -.1441 | | | |
| 180.000 | -.0190 | -.0242 | .1362 | .2438 | | | | | | |
| 320.000 | -.0289 | .1780 | .3301 | -.0783 | -.1689 | -.1546 | -.1982 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB40)

ALPHA0( 3) = -.077 BETA0 ( 1) = -6.251

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4379 | .7782 | .6777 | .5076 | .1665 | .4878 | | .0558 | | .0351 | -.0155 | .0060 | -.0301 | -.0191 | .0375 |
| 20.000 | | | .7186 | .6319 | .3172 | .4355 | | -.0884 | | .1010 | | | | | |
| 40.000 | | | .7894 | .7358 | .5500 | .2898 | | .2164 | | -.0147 | .0945 | -.0646 | -.0295 | .0654 | .0394 |
| 55.000 | | | .7936 | .7559 | .6730 | .3912 | | .3227 | | .1902 | | | | | |
| 70.000 | | | .7563 | .6869 | .6257 | .4368 | | .3020 | | .2193 | .0155 | .0168 | .0139 | -.0243 | |
| 90.000 | | .8890 | .7386 | .6150 | .5600 | .4549 | | .3227 | | .0000 | .0520 | .0204 | -.0114 | -.0463 | |
| 120.000 | | | .7057 | .5535 | .4626 | .4381 | | .4404 | | .3991 | .1098 | -.0810 | -.0978 | -.0806 | |
| 140.000 | | | | | | | | | | .3959 | | | | | |
| 150.000 | | | .6065 | .4383 | .3857 | .3718 | | | | .2199 | -.1426 | -.1172 | -.1014 | -.0636 | |
| 151.000 | | | | | | | | | .9531 | | | | | | |
| 156.000 | | | | | | | | 1.0463 | | | | | | | |
| 162.000 | | | | | | | | | 1.0350 | | | | | | |
| 165.000 | | | | | | | | | | .0266 | -.1148 | -.1185 | -.0913 | -.0639 | |
| 169.000 | | | | | | | | 1.1056 | | | | | | | |
| 174.000 | | | | | | | .8894 | | | | | | | | |
| 180.000 | 1.4379 | .7956 | .4760 | .3710 | .3282 | .3133 | | 1.0140 | | -.0472 | -.1697 | -.0965 | -.0826 | -.0676 | |
| 305.000 | | | .4284 | .2773 | .2061 | .1587 | | .0619 | | -.0175 | | | | | |
| 320.000 | | | .5649 | .3593 | .1826 | .2188 | | -.0661 | | -.0985 | .0004 | -.1282 | -.1519 | -.0180 | -.0788 |
| 340.000 | | | .6746 | .4153 | .2009 | .3149 | | .0028 | | -.0884 | | | | | |

| X/LB | .0520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0268 | .3122 | .4998 | .3132 | -.1785 | -.2199 | -.0789 | | -.0524 | -.0731 |
| 40.000 | .0011 | .1857 | .2627 | -.0944 | -.2060 | -.0147 | -.1521 | | -.1725 | -.1429 |
| 70.000 | .0176 | -.0544 | -.0445 | -.0633 | .0000 | .0257 | -.0103 | | | |
| 90.000 | .0190 | -.0094 | -.0369 | .0325 | .0707 | .0187 | -.0235 | | | |
| 105.000 | | | .0000 | .1804 | .0862 | -.0217 | -.0611 | | | |
| 110.000 | | | | | | | | -.1109 | | |
| 120.000 | -.0494 | -.0399 | -.0485 | .1709 | .1329 | .0204 | -.0320 | -.1026 | | |
| 135.000 | | | .1342 | .1567 | .1127 | .0013 | -.0320 | | | |
| 150.000 | -.0481 | -.0389 | .1567 | .1190 | -.0739 | .0187 | .0821 | | | |
| 165.000 | -.0511 | | .1332 | | .3311 | .3000 | -.0479 | | | |
| 180.000 | -.0722 | -.0650 | .1041 | .0819 | | | | | | |
| 320.000 | .0507 | .1762 | .4593 | .2537 | -.0769 | -.1448 | -.1382 | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET840)

ALPHAO( 3) = -.075 BETAO ( 2) = -4.195

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4100 | .8202 | .6829 | .4467 | .1835 | .5238 | | .0386 | | -.0018 | .1271 | -.0440 | -.0176 | -.0480 | -.0162 |
| 20.000 | | | .7067 | .5302 | .2842 | .4497 | | -.1057 | | .0668 | | | | | |
| 40.000 | | | .7493 | .6248 | .5085 | .2946 | | .1994 | | -.0380 | .0556 | -.0754 | -.0286 | .0537 | .0066 |
| 55.000 | | | .7367 | .6396 | .6186 | .3541 | | .3020 | | .1629 | | | | | |
| 70.000 | | | .6945 | .5768 | .5613 | .3987 | | .2794 | | .1988 | .0020 | -.0100 | -.0218 | -.0600 | |
| 90.000 | | .8244 | .6784 | .5273 | .4820 | .4190 | | .3023 | | .0000 | .0396 | -.0098 | -.0454 | -.0707 | |
| 120.000 | | | .6587 | .5066 | .4025 | .4174 | | .4347 | | .3705 | .0860 | -.1105 | -.1098 | -.0800 | |
| 140.000 | | | | | | | | | | .3539 | | | | | |
| 150 000 | | | .5877 | .4302 | .3738 | .3647 | | | | .1774 | -.1338 | -.1160 | -.0949 | -.0493 | |
| 151.000 | | | | | | | | | .9282 | | | | | | |
| 156.000 | | | | | | | | 1.0334 | | | | | | | |
| 162.000 | | | | | | | | | 1.0183 | | | | | | |
| 165.000 | | | | | | | | | | .0419 | -.1247 | -.1134 | -.0849 | -.0459 | |
| 169.000 | | | | | | | | 1.0986 | | | | | | | |
| 174.000 | | | | | | | .9007 | | | | | | | | |
| 180.000 | 1.4100 | .8093 | .4823 | .3842 | .3414 | .3195 | | 1.0689 | | -.0567 | -.1577 | -.0807 | -.0632 | -.0496 | |
| 305.000 | | | .4875 | .3182 | .2498 | .1603 | | .0946 | | -.0019 | | | | | |
| 320.000 | | | .6076 | .3949 | .2037 | .2476 | | -.0060 | | -.0548 | .0367 | -.1108 | -.1390 | -.0843 | -.0433 |
| 340.000 | | | .6837 | .4111 | .2051 | .2721 | | .0063 | | -.0789 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0535 | .2412 | .5093 | .3288 | -.1500 | -.2443 | -.1260 | | -.0524 | -.0976 |
| 40.000 | .0373 | .1146 | .2943 | -.0285 | -.1930 | -.0623 | -.1732 | | -.1680 | -.1394 |
| 70.000 | -.0083 | -.0717 | -.0697 | -.0518 | .0000 | -.0011 | -.0254 | | | |
| 90.000 | .0016 | -.0258 | -.0554 | .0886 | .0240 | -.0087 | -.0370 | | | |
| 105.000 | | | .0000 | .1271 | .0316 | -.0557 | -.0785 | | | |
| 110.000 | | | | | | | | -.1217 | | |
| 120.000 | -.0271 | -.0222 | -.0129 | .1630 | .1319 | .0006 | -.0617 | -.1188 | | |
| 135.000 | | | .1297 | .1756 | .1154 | -.0060 | -.0449 | | | |
| 150.000 | -.0433 | -.0325 | .1589 | .1564 | -.0382 | .0755 | .1154 | | | |
| 165.000 | -.0473 | | .1450 | | .3129 | .2575 | -.0663 | | | |
| 180.000 | -.0598 | -.0538 | .1188 | .1554 | | | | | | |
| 320.000 | .0039 | .1058 | .4589 | .2719 | -.1186 | -.1570 | -.1758 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB40)

ALPHAO( 3) = -.072 BETAO ( 3) = .017

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4348 | .9943 | .6759 | .4436 | .1899 | .2455 | | .0105 | | .0517 | .1281 | -.0673 | -.1082 | -.0262 | .0131 |
| 20.000 | | | .6530 | .4773 | .1585 | .2786 | | -.0313 | | -.0349 | | | | | |
| 40.000 | | | .6323 | .5064 | .2956 | .2328 | | .1311 | | -.0964 | .0338 | -.0424 | -.0612 | .0101 | .0273 |
| 55.000 | | | .5784 | .4646 | .3927 | .2511 | | .2491 | | .0951 | | | | | |
| 70.000 | | | .5597 | .4086 | .3548 | .2979 | | .2206 | | .1476 | -.0431 | -.0650 | -.0709 | -.1082 | |
| 90.000 | | .6818 | .5565 | .3800 | .3159 | .3025 | | .2300 | | .0000 | -.0012 | -.0602 | -.1050 | -.1040 | |
| 120.000 | | | .5661 | .4209 | .3074 | .2989 | | .4559 | | .2894 | .0197 | -.1529 | -.1182 | -.0696 | |
| 140.000 | | | | | | | | | | .2550 | | | | | |
| 150.000 | | | .5377 | .4112 | .3508 | .3087 | | | | .0963 | -.1370 | -.1124 | -.0693 | -.0498 | |
| 151.000 | | | | | | | | | .7990 | | | | | | |
| 156.000 | | | | | | | | .8585 | | | | | | | |
| 162.000 | | | | | | | | | .9614 | | | | | | |
| 165.000 | | | | | | | | | | .0354 | -.1530 | -.0683 | -.0466 | -.0415 | |
| 169.000 | | | | | | | | 1.0907 | | | | | | | |
| 174.000 | | | | | | | .8633 | | | | | | | | |
| 180.000 | 1.4348 | .7977 | .4932 | .4068 | .3644 | .3191 | | 1.1250 | | -.0879 | -.1357 | -.0557 | -.0362 | -.0415 | |
| 305.000 | | | .6440 | .4413 | .2953 | .2894 | | .1765 | | .0819 | | | | | |
| 320.000 | | | .7239 | .4734 | .1738 | .3440 | | .0731 | | -.0712 | .1133 | -.1014 | -.0787 | -.0415 | -.0402 |
| 340.000 | | | .7358 | .4254 | .1791 | .2033 | | .0034 | | .0652 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0256 | .2063 | .3414 | .3016 | -.1738 | -.1512 | -.1447 | | -.1002 | -.1032 |
| 40.000 | -.0700 | .1620 | .2641 | .0345 | -.2146 | -.1111 | -.1979 | | -.0933 | -.0979 |
| 70.000 | -.0333 | -.0825 | -.0853 | .0189 | .0000 | -.0218 | -.0448 | | | |
| 90.000 | -.0240 | -.0419 | -.0737 | .0637 | -.0112 | -.0314 | -.0430 | | | |
| 105.000 | | | .0000 | .1135 | -.0361 | -.0908 | -.1058 | | | |
| 110.000 | | | | | | | | -.1385 | | |
| 120.000 | -.0395 | -.0156 | .0962 | .1228 | .1294 | -.0162 | -.0982 | -.1441 | | |
| 135.000 | | | .1009 | .2094 | .1085 | .0056 | -.0179 | | | |
| 150.000 | -.0577 | -.0451 | .0664 | .2154 | .0936 | .0790 | .0747 | | | |
| 165.000 | -.0548 | | .0046 | | .2784 | .1639 | -.1216 | | | |
| 180.000 | -.0518 | -.0541 | -.0056 | .2844 | | | | | | |
| 320.000 | -.0101 | .1752 | .4026 | .1178 | -.1466 | -.1649 | -.2340 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB40)

ALPHAO( 3) = -.054 BETAO ( 4) = 3.568

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4251 | .7644 | .6617 | .5278 | .1779 | .4480 | | -.0042 | | -.0058 | .0487 | -.0828 | -.1652 | -.0117 | -.0510 |
| 20.000 | | | .5815 | .4804 | .1498 | .2362 | | .0058 | | -.1186 | | | | | |
| 40.000 | | | .5065 | .4558 | .2141 | .2382 | | .0210 | | -.0776 | .0278 | -.0619 | -.0969 | -.0146 | -.0157 |
| 55.000 | | | .4209 | .3915 | .2519 | .1421 | | .1369 | | .0148 | | | | | |
| 70.000 | | | .3613 | .3321 | .2611 | .1003 | | .1935 | | .0872 | -.0870 | -.1128 | -.1030 | -.1247 | |
| 90.000 | | .5278 | .3739 | .2764 | .2222 | .1490 | | .1596 | | .0000 | -.0466 | -.1101 | -.1377 | -.1079 | |
| 120.000 | | | .4186 | .2979 | .2071 | .2009 | | .3443 | | .1645 | -.0267 | -.1872 | -.1169 | -.0965 | |
| 140.000 | | | | | | | | | | .0670 | | | | | |
| 150.000 | | | .4366 | .3430 | .2924 | .2398 | | | | .0066 | -.1751 | -.0943 | -.0635 | -.0609 | |
| 151.000 | | | | | | | | | .6334 | | | | | | |
| 156.000 | | | | | | | | .7803 | | | | | | | |
| 162.000 | | | | | | | | | .8712 | | | | | | |
| 165.000 | | | | | | | | | | -.0273 | -.1490 | -.0907 | -.0483 | -.0527 | |
| 169.000 | | | | | | | | 1.0626 | | | | | | | |
| 174.000 | | | | | | | .8952 | | | | | | | | |
| 180.000 | 1.4251 | .7811 | .4692 | .3747 | .3375 | .3110 | | 1.0869 | | -.0785 | -.1601 | -.0819 | -.0648 | -.0520 | |
| 305.000 | | | .6565 | .6532 | .6001 | .3769 | | .2542 | | .1449 | | | | | |
| 320.000 | | | .6939 | .6622 | .4871 | .3143 | | .1563 | | -.0440 | .1185 | -.0897 | -.0797 | .0028 | -.0170 |
| 340.000 | | | .6929 | .5750 | .2917 | .3924 | | -.1195 | | .0604 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0787 | .2284 | .3519 | .3562 | -.1843 | -.1521 | -.1335 | | -.0984 | -.1010 |
| 40.000 | -.0454 | .0724 | .4206 | .0789 | -.2040 | -.1531 | -.1783 | | -.1029 | -.1089 |
| 70.000 | -.0308 | -.0814 | -.0859 | .0144 | .0000 | -.0390 | -.0679 | | | |
| 90.000 | -.0296 | -.0382 | -.0871 | .0676 | -.0344 | -.0440 | -.0620 | | | |
| 105.000 | | | .0000 | .0693 | -.0754 | -.1203 | -.1279 | | | |
| 110.000 | | | | | | | | -.1532 | | |
| 120.000 | -.0982 | -.0396 | .1054 | .0715 | .0563 | -.0656 | -.1318 | -.1785 | | |
| 135.000 | | | .1256 | .1727 | .0678 | -.0300 | -.0458 | | | |
| 150.000 | -.0629 | -.0733 | .1146 | .1637 | .0784 | -.0080 | -.0254 | | | |
| 165.000 | -.0632 | | .1100 | | .1330 | .0556 | -.1450 | | | |
| 180.000 | -.0609 | -.0555 | .1236 | .1670 | | | | | | |
| 320.000 | .0005 | .2023 | .3175 | -.0182 | -.1825 | -.1289 | -.1770 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB40)

ALPHA0( 3) = -.044 BETA0 ( 5) = 6.274

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3733 | .8171 | .6780 | .4830 | .1327 | .4501 | | -.0165 | | .0119 | -.0048 | -.0738 | -.1889 | -.0633 | -.0722 |
| 20.000 | | | .6177 | .3871 | .1533 | .1844 | | -.0625 | | -.0949 | | | | | |
| 40.000 | | | .5063 | .3444 | .1559 | .1369 | | -.0211 | | -.0994 | -.0198 | -.0728 | -.1032 | -.0549 | -.0742 |
| 55.000 | | | .4040 | .2894 | .1582 | .1088 | | .0747 | | -.0191 | | | | | |
| 70.000 | | | .3507 | .2717 | .1798 | .0931 | | .1259 | | .0624 | -.1012 | -.1251 | -.1130 | -.1253 | |
| 90.000 | | .4437 | .3272 | .2413 | .1683 | .0970 | | .0890 | | .0000 | -.0640 | -.1276 | -.1509 | -.1097 | |
| 120.000 | | | .3653 | .2580 | .1772 | .1566 | | .3071 | | .0982 | -.1032 | -.1859 | -.1149 | -.1298 | |
| 140.000 | | | | | | | | | | -.0035 | | | | | |
| 150.000 | | | .3972 | .3224 | .2684 | .2200 | | | | -.0182 | -.1895 | -.1172 | -.0899 | -.0689 | |
| 151.000 | | | | | | | | | .5607 | | | | | | |
| 156.000 | | | | | | | | .8888 | | | | | | | |
| 162.000 | | | | | | | | | .8103 | | | | | | |
| 165.000 | | | | | | | | | | -.0957 | -.1573 | -.1029 | -.0831 | -.0597 | |
| 169.000 | | | | | | | | 1.0215 | | | | | | | |
| 174.000 | | | | | | | .8579 | | | | | | | | |
| 180.000 | 1.3733 | .7429 | .4595 | .3708 | .3382 | .3097 | | 1.0350 | | -.0702 | -.1696 | -.1049 | -.0954 | -.0683 | |
| 305.000 | | | .8042 | .7295 | .6493 | .4210 | | .2825 | | .1818 | | | | | |
| 320.000 | | | .7826 | .6994 | .4857 | .2681 | | .2068 | | -.0003 | .0812 | -.0893 | -.0669 | .0296 | -.0309 |
| 340.000 | | | .7525 | .5782 | .2455 | .4288 | | -.0978 | | .0893 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.1354 | .1288 | .3516 | .3443 | -.1895 | -.1428 | -.1249 | | -.0859 | -.0892 |
| 40.000 | -.0002 | .0818 | .4179 | .1410 | -.1991 | -.1401 | -.1454 | | -.0948 | -.0981 |
| 70.000 | -.0398 | -.0924 | -.0932 | -.0003 | .0000 | -.0477 | -.0806 | | | |
| 90.000 | -.0392 | -.0498 | -.0614 | .0800 | -.0513 | -.0765 | -.0787 | | | |
| 105.000 | | | .0000 | .0577 | -.0868 | -.1308 | -.1348 | | | |
| 110.000 | | | | | | | | -.1659 | | |
| 120.000 | -.1195 | -.0607 | .0773 | .0133 | .0123 | -.0876 | -.1596 | -.1963 | | |
| 135.000 | | | .0886 | .1054 | .0329 | -.0602 | -.0873 | | | |
| 150.000 | -.0937 | -.0938 | .0796 | .1210 | .0438 | -.0638 | -.0734 | | | |
| 165.000 | -.0851 | | .0800 | | .0769 | .0139 | -.1494 | | | |
| 180.000 | -.0703 | -.0727 | .1005 | .0813 | | | | | | |
| 320.000 | -.0346 | .1948 | .3434 | -.0768 | -.1491 | -.0942 | -.1692 | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET840)

ALPHA0( 4) = 3.465 BETA0 ( 1) = -4.189

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3185 | 1.0001 | .7295 | .4236 | .1510 | .3205 | | .0297 | | -.0196 | .1080 | -.0702 | -.0434 | -.0694 | .0043 |
| 20.000 | | | .7711 | .5199 | .1987 | .3057 | | -.1080 | | .0481 | | | | | |
| 40.000 | | | .8191 | .6440 | .4591 | .1888 | | .1870 | | -.0490 | .0155 | -.1002 | .0667 | .0262 | .0000 |
| 55.000 | | | .7769 | .6443 | .5732 | .3135 | | .2622 | | .1268 | | | | | |
| 70.000 | | | .7121 | .5732 | .5231 | .3499 | | .2136 | | .1550 | -.0473 | -.0489 | -.0548 | -.0308 | |
| 90.000 | | .7937 | .6666 | .5195 | .4675 | .3574 | | .2421 | | .0000 | .0050 | -.0373 | -.0775 | -.0528 | |
| 120.000 | | | .6004 | .4546 | .3619 | .3308 | | .3298 | | .3103 | .0449 | -.1241 | -.1497 | -.1305 | |
| 140.000 | | | | | | | | | | .2969 | | | | | |
| 150.000 | | | .5017 | .3466 | .3002 | .2825 | | | | .1449 | -.1754 | -.1633 | -.1364 | -.0919 | |
| 151.000 | | | | | | | | | .8083 | | | | | | |
| 156.000 | | | | | | | | .8700 | | | | | | | |
| 162.000 | | | | | | | | | .8961 | | | | | | |
| 165.000 | | | | | | | | | | -.0087 | -.1601 | -.1572 | -.1167 | -.0879 | |
| 169.000 | | | | | | | | .9443 | | | | | | | |
| 174.000 | | | | | | | .7558 | | | | | | | | |
| 180.000 | 1.3185 | .6856 | .3901 | .3009 | .2648 | .2452 | | .9249 | | -.0908 | -.1878 | -.1248 | -.0917 | -.0876 | |
| 305.000 | | | .4875 | .2989 | .1882 | .1214 | | .0611 | | -.0293 | | | | | |
| 320.000 | | | .6401 | .3751 | .1293 | .2091 | | -.0328 | | -.0600 | .0135 | -.1384 | -.1526 | -.0189 | .0545 |
| 340.000 | | | .7218 | .3602 | .1512 | .1774 | | .0031 | | -.0767 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1070 | .3145 | .5448 | .5001 | -.1194 | -.2158 | -.1214 | | -.0284 | -.0916 |
| 40.000 | .1404 | .1787 | .3655 | .0132 | -.1793 | -.1323 | -.1676 | | -.1700 | -.1315 |
| 70.000 | -.0400 | -.0999 | -.1098 | -.1121 | .0000 | -.0422 | -.0667 | | | |
| 90.000 | -.0380 | -.0608 | -.0922 | -.0402 | .0124 | -.0303 | -.0719 | | | |
| 105.000 | | | .0000 | .0991 | .0406 | -.0651 | -.1056 | | | |
| 110.000 | | | | | | | | -.1478 | | |
| 120.000 | -.1021 | -.1015 | -.0680 | .0959 | .1006 | -.0271 | -.0752 | -.1313 | | |
| 135.000 | | | .0951 | .0893 | .0442 | -.0439 | -.0848 | | | |
| 150.000 | -.0734 | -.0697 | .0994 | .0837 | -.1032 | -.0475 | .0250 | | | |
| 165.000 | -.0731 | | .0957 | | .1767 | .1444 | -.1010 | | | |
| 180.000 | -.0777 | -.0758 | .1007 | .0972 | | | | | | |
| 320.000 | .0162 | .2368 | .5921 | .3790 | -.0935 | -.1303 | -.1775 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET840)

ALPHAO( 4) = 3.478 BETAO ( 2) = .022

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3356 | 1.1303 | .7943 | .3642 | .0940 | .1517 | | -.0010 | | .0921 | .1203 | -.0851 | -.1292 | .0142 | .0496 |
| 20.000 | | | .7949 | .4248 | .0809 | .1452 | | -.0534 | | .0584 | | | | | |
| 40.000 | | | .7723 | .4948 | .1813 | .2163 | | .1021 | | -.1149 | -.0086 | -.0724 | -.0686 | .0346 | .0466 |
| 55.000 | | | .6342 | .4831 | .3263 | .2287 | | .1818 | | .0665 | | | | | |
| 70.000 | | | .5761 | .4060 | .3156 | .2513 | | .1617 | | .0953 | -.0770 | -.0972 | -.1075 | -.0978 | |
| 90.000 | | .6435 | .5509 | .3911 | .3005 | .2559 | | .1844 | | .0000 | -.0420 | -.0809 | -.1279 | -.1094 | |
| 120.000 | | | .5099 | .3720 | .2644 | .2333 | | .3766 | | .2233 | -.0083 | -.1685 | -.1607 | -.1150 | |
| 140.000 | | | | | | | | | | .2073 | | | | | |
| 150.000 | | | .4463 | .3295 | .2759 | .2336 | | | | .0709 | -.1672 | -.1558 | -.1101 | -.0896 | |
| 151.000 | | | | | | | | | .6771 | | | | | | |
| 156.000 | | | | | | | | .7166 | | | | | | | |
| 162.000 | | | | | | | | | .8361 | | | | | | |
| 165.000 | | | | | | | | | | -.0060 | -.1784 | -.1172 | -.0893 | -.0823 | |
| 169.000 | | | | | | | | .8991 | | | | | | | |
| 174.000 | | | | | | | .7020 | | | | | | | | |
| 180.000 | 1.3356 | .6474 | .3908 | .3214 | .2808 | .2382 | | .9411 | | -.1103 | -.1666 | -.0942 | -.0809 | -.0804 | |
| 305.000 | | | .6158 | .3791 | .2884 | .3011 | | .1549 | | .0532 | | | | | |
| 320.000 | | | .7865 | .3820 | .1294 | .2877 | | .0636 | | -.1113 | .0572 | -.1224 | -.0627 | -.0354 | -.0096 |
| 340.000 | | | .8244 | .3250 | .0783 | .2287 | | -.0870 | | .0686 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1753 | .2666 | .3698 | .3427 | -.1551 | -.1200 | -.1539 | | -.0969 | -.1052 |
| 40.000 | -.0188 | .2200 | .3439 | .1211 | -.1923 | -.1296 | -.2085 | | -.1335 | -.1217 |
| 70.000 | -.0685 | -.1129 | -.1267 | -.0444 | .0000 | -.0579 | -.0808 | | | |
| 90.000 | -.0536 | -.0645 | -.0988 | .0551 | -.0148 | -.0732 | -.1037 | | | |
| 105.000 | | | .0000 | .0909 | -.0314 | -.0958 | -.1255 | | | |
| 110.000 | | | | | | | | -.1632 | | |
| 120.000 | -.0615 | -.0458 | .0933 | .0827 | .0628 | -.0438 | -.1027 | -.1420 | | |
| 135.000 | | | .0899 | .1298 | .0867 | -.0117 | -.0356 | | | |
| 150.000 | -.0744 | -.0580 | .0627 | .1902 | .0671 | .0593 | .0276 | | | |
| 165.000 | -.0787 | | -.0292 | | .2432 | .1159 | -.1169 | | | |
| 180.000 | -.0870 | -.0640 | -.0365 | .2568 | | | | | | |
| 320.000 | .0251 | .2634 | .4513 | .2011 | -.1409 | -.1394 | -.1932 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (REV:0)

ALPHAO( 4) = 3.487 BETAO ( 3) = 3.575

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2709 | 1.0021 | .7410 | .3884 | .1034 | .2982 | | -.0266 | | -.0238 | .0391 | -.1078 | -.1714 | -.0359 | -.0184 |
| 20.000 | | | .6948 | .3437 | .1151 | .1253 | | -.0235 | | -.1388 | | | | | |
| 40.000 | | | .5925 | .3667 | .1128 | .1859 | | -.0131 | | -.1239 | .0107 | -.0823 | -.1176 | -.0112 | .0001 |
| 55.000 | | | .4731 | .3214 | .1795 | .1145 | | .0902 | | -.0176 | | | | | |
| 70.000 | | | .4353 | .2901 | .1910 | .0494 | | .1352 | | .0400 | -.1156 | -.1355 | -.1286 | -.1442 | |
| 90.000 | | .4679 | .4102 | .2767 | .1841 | .0949 | | .1478 | | .0000 | -.0771 | -.1312 | -.1578 | -.1370 | |
| 120.000 | | | .3727 | .2835 | .1829 | .1538 | | .2505 | | .1742 | -.0539 | -.2058 | -.1562 | -.1202 | |
| 140.000 | | | | | | | | | | .0277 | | | | | |
| 150.000 | | | .3482 | .2786 | .2327 | .1849 | | | | -.0216 | -.2035 | -.1283 | -.1036 | -.0944 | |
| 151.000 | | | | | | | | | .5482 | | | | | | |
| 156.000 | | | | | | | | .7000 | | | | | | | |
| 162.000 | | | | | | | | | .7637 | | | | | | |
| 165.000 | | | | | | | | | | -.0702 | -.1877 | -.1231 | -.0900 | -.0901 | |
| 169.000 | | | | | | | | .9204 | | | | | | | |
| 174.000 | | | | | | | .7908 | | | | | | | | |
| 180.000 | 1.2709 | .6290 | .3666 | .2979 | .2651 | .2353 | | .9281 | | -.1127 | -.1874 | -.1273 | -.0997 | -.0914 | |
| 305.000 | | | .7542 | .6131 | .5050 | .3577 | | .2191 | | .1135 | | | | | |
| 320.000 | | | .8173 | .6280 | .3382 | .2124 | | .1498 | | -.0454 | .0225 | -.1189 | -.0602 | -.0197 | -.0151 |
| 340.000 | | | .8028 | .4823 | .1116 | .3865 | | -.1342 | | .0391 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0339 | .2441 | .3945 | .3644 | -.1477 | -.1500 | -.1491 | | -.1000 | -.1050 |
| 40.000 | -.0227 | .1387 | .5208 | .1794 | -.1519 | -.1235 | -.1785 | | -.1010 | -.1066 |
| 70.000 | -.0584 | -.1017 | -.1086 | -.0146 | .0000 | -.0707 | -.0945 | | | |
| 90.000 | -.0448 | -.0660 | -.0918 | .0284 | -.0525 | -.0688 | -.0863 | | | |
| 105.000 | | | .0000 | .0553 | -.1056 | -.1380 | -.1484 | | | |
| 110.000 | | | | | | | | -.1745 | | |
| 120.000 | -.0772 | -.0328 | .0768 | .0771 | .0622 | -.0797 | -.1510 | -.1861 | | |
| 135.000 | | | .1145 | .1192 | .0480 | -.0569 | -.0767 | | | |
| 150.000 | -.0901 | -.0802 | .0976 | .0775 | .0224 | -.0331 | -.0536 | | | |
| 165.000 | -.0875 | | .1006 | | .0536 | .0046 | -.1500 | | | |
| 180.000 | -.0825 | -.0726 | .1003 | .0930 | | | | | | |
| 320.000 | .0550 | .2506 | .3532 | .0297 | -.1719 | -.1418 | -.1689 | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB40)

ALPHAO( 5) = 6.182 BETAO ( 1) = .040

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3980 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3460 | 1.2366 | .8185 | .2491 | .0231 | .2373 | | .0089 | | .0819 | .1013 | -.0988 | -.1324 | .0667 | .1574 |
| 20.000 | | | .8340 | .3129 | -.0132 | .1889 | | -.0738 | | .0653 | | | | | |
| 40.000 | | | .8311 | .4368 | .1783 | .1751 | | .0861 | | -.1240 | -.0334 | -.1047 | -.0650 | .0486 | .1236 |
| 55.000 | | | .7172 | .4666 | .3156 | .2075 | | .1605 | | .0488 | | | | | |
| 70.000 | | | .5579 | .3937 | .3220 | .2301 | | .1348 | | .0751 | -.1002 | -.1168 | -.1243 | -.0909 | |
| 90.000 | | .6237 | .5495 | .3798 | .2897 | .2314 | | .1660 | | .0000 | -.0514 | -.0942 | -.1418 | -.1114 | |
| 120.000 | | | .4914 | .3486 | .2390 | .2190 | | .3233 | | .1985 | -.0256 | -.1701 | -.1791 | -.1347 | |
| 140.000 | | | | | | | | | | .1844 | | | | | |
| 150.000 | | | .4120 | .2939 | .2360 | .2161 | | | | .0565 | -.1806 | -.1714 | -.1227 | -.1077 | |
| 151.000 | | | | | | | | | .6298 | | | | | | |
| 156.000 | | | | | | | | .6840 | | | | | | | |
| 162.000 | | | | | | | | | .7657 | | | | | | |
| 165.000 | | | | | | | | | | -.0246 | -.1878 | -.1331 | -.1071 | -.1001 | |
| 169.000 | | | | | | | | .8271 | | | | | | | |
| 174.000 | | | | | | | .6492 | | | | | | | | |
| 180.000 | 1.3460 | .5830 | .3488 | .2835 | .2403 | .2180 | | .8594 | | -.1195 | -.1790 | -.1075 | -.1006 | -.0971 | |
| 305.000 | | | .6372 | .3687 | .2890 | .2642 | | .1348 | | .0349 | | | | | |
| 320.000 | | | .8243 | .3379 | .1545 | .2527 | | .0585 | | -.1231 | .0212 | -.1341 | -.0724 | -.0144 | .0396 |
| 340.000 | | | .8515 | .2429 | -.0144 | .3113 | | -.1366 | | .0595 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1785 | .3073 | .4023 | .3562 | -.1530 | -.1222 | -.1758 | | -.0972 | -.1048 |
| 40.000 | .0266 | .2656 | .4016 | .1706 | -.1885 | -.1689 | -.2032 | | -.1359 | -.1197 |
| 70.000 | -.0773 | -.1245 | -.1384 | -.1249 | .0000 | -.0682 | -.0906 | | | |
| 90.000 | -.0614 | -.0796 | -.1106 | .0297 | -.0152 | -.0622 | -.1028 | | | |
| 105.000 | | | .0000 | .0741 | -.0105 | -.1050 | -.1411 | | | |
| 110.000 | | | | | | | | -.1725 | | |
| 120.000 | -.0756 | -.0609 | .0579 | .0882 | .0329 | -.0724 | -.1021 | -.1398 | | |
| 135.000 | | | .0592 | .1068 | .0345 | -.0089 | -.0298 | | | |
| 150.000 | -.0783 | -.0575 | .0595 | .1124 | .0723 | .0403 | .0016 | | | |
| 165.000 | -.0826 | | .0443 | | .2131 | .0935 | -.1117 | | | |
| 180.000 | -.0945 | -.0602 | .0234 | .2559 | | | | | | |
| 320.000 | .0253 | .3457 | .4850 | .2758 | -.1275 | -.1580 | -.2016 | | | |

ARC97-019 1A81 LVAP(ALLML SCALED) ORB. FUSELAGE (RETB41) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.200 RN/FT = 2.500
ELV-IB = .000 ELV-OB = .000
RUDDER = .000 SPOBRK = .000

ALPHAO( 1) = -6.332 BETAO ( 1) = -.112

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .900 | 1.6370 | .8584 | .2563 | .2103 | .6283 | .5151 | | .0668 | | .0193 | .2573 | -.0111 | .0002 | .0142 | .0817 |
| 20.000 | | | .3019 | .2133 | .5846 | .5118 | | .0844 | | .0557 | | | | | |
| 40.000 | | | .4385 | .1846 | .2528 | .3668 | | .2104 | | -.0235 | .0904 | .0223 | .0322 | .0837 | .0315 |
| 55.000 | | | .5377 | .2578 | .2400 | .3262 | | .3558 | | .2121 | | | | | |
| 70.000 | | | .5890 | .3338 | .2231 | .2154 | | .3888 | | .2889 | .0584 | .0263 | .0266 | -.0079 | |
| 90.000 | | .8191 | .6356 | .4062 | .2693 | .1972 | | .3123 | | .0000 | .1029 | .0306 | -.0152 | -.0005 | |
| 120.000 | | | .6922 | .5234 | .3833 | .3357 | | .4309 | | .2759 | .0547 | -.0780 | -.0058 | .0179 | |
| 140.000 | | | | | | | | | | .2165 | | | | | |
| 150.000 | | | .6949 | .5488 | .4770 | .4212 | | | | .1673 | -.0738 | -.0366 | .0129 | .0411 | |
| 151.000 | | | | | | | | | .9515 | | | | | | |
| 156.000 | | | | | | | | 1.0989 | | | | | | | |
| 162.000 | | | | | | | | | 1.1656 | | | | | | |
| 165.000 | | | | | | | | | | .1339 | -.0795 | -.0045 | .0229 | .0489 | |
| 169.000 | | | | | | | | 1.3839 | | | | | | | |
| 174.000 | | | | | | | 1.1233 | | | | | | | | |
| 180.000 | 1.8370 | 1.8178 | .6556 | .5495 | .4954 | .4553 | | 1.4029 | | .0069 | -.0637 | -.0185 | .0202 | .0530 | |
| 305.000 | | | .4988 | .2076 | .2560 | .2887 | | .3013 | | .1723 | | | | | |
| 320.000 | | | .3709 | .1971 | .4580 | .3076 | | .1660 | | .0024 | .1973 | .0135 | -.0185 | .0271 | .0042 |
| 340.000 | | | .3074 | .2029 | .5766 | .4897 | | .0744 | | .0773 | | | | | |

| X/LB | .0520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0421 | .1199 | .4322 | .4223 | -.1340 | -.2248 | -.1528 | | -.0921 | -.1037 |
| 40.000 | -.0367 | .1042 | .3160 | -.0432 | -.2040 | -.1391 | -.1797 | | -.0911 | -.0989 |
| 70.000 | .0488 | -.0046 | -.0139 | .0973 | .0000 | .0484 | .0172 | | | |
| 90.000 | .0510 | .0400 | .0025 | .1953 | .0621 | .0372 | .0162 | | | |
| 105.000 | | | .0000 | .1840 | .0225 | -.0277 | -.0499 | | | |
| 110.000 | | | | | | | | -.0874 | | |
| 120.000 | .0138 | .0530 | .0902 | .2124 | .1833 | .0370 | -.0353 | -.1010 | | |
| 135.000 | | | .1089 | .3065 | .1899 | .0775 | .0537 | | | |
| 150.000 | .0363 | .0339 | .0505 | .3060 | .2079 | .1798 | .1505 | | | |
| 165.000 | .0390 | | .0328 | | .3992 | .2724 | -.0738 | | | |
| 180.000 | .0394 | .0366 | .0332 | .3917 | | | | | | |
| 320.000 | .0264 | .1857 | .3279 | .1215 | -.1254 | -.1341 | -.1905 | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB41)

ALPHA0( 2) = -4.327 BETA0 ( 1) = -4.351

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1860 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.6080 | .8318 | .2295 | .3413 | .4415 | .4785 | | .0491 | | .0928 | .1102 | .0480 | .0647 | -.0505 | .0351 |
| 20.000 | | | .3133 | .3177 | .5706 | .4831 | | -.0306 | | .1378 | | | | | |
| 40.000 | | | .5161 | .3541 | .7257 | .3305 | | .2932 | | .0371 | .1230 | -.0015 | .0463 | .1435 | .0062 |
| 55.000 | | | .6378 | .3477 | .4602 | .4811 | | .3899 | | .2498 | | | | | |
| 70.000 | | | .6950 | .4289 | .3854 | .5335 | | .3722 | | .2862 | .0611 | .0634 | .0477 | -.0047 | |
| 90.000 | | .9198 | .7372 | .5002 | .3591 | .3962 | | .4228 | | .0000 | .1166 | .0594 | .0126 | -.0041 | |
| 120.000 | | | .7627 | .5859 | .4412 | .4005 | | .5778 | | .4585 | .1637 | -.0458 | -.0298 | -.0077 | |
| 140.000 | | | | | | | | | | .4293 | | | | | |
| 150.000 | | | .7066 | .5366 | .4702 | .4158 | | | | .2421 | -.0509 | -.0315 | -.0229 | -.0017 | |
| 151.000 | | | | | | | | | 1.0030 | | | | | | |
| 156.000 | | | | | | | | 1.0469 | | | | | | | |
| 162.000 | | | | | | | | | 1.1656 | | | | | | |
| 165.000 | | | | | | | | | | .1264 | -.0610 | -.0365 | -.0158 | -.0054 | |
| 169.000 | | | | | | | | 1.2554 | | | | | | | |
| 174.000 | | | | | | | 1.0050 | | | | | | | | |
| 18 9 | 1.6080 | .9553 | .5981 | .4889 | .4395 | .4002 | | 1.2421 | | -.0048 | -.0970 | -.0141 | -.0111 | -.0146 | |
| 30 9 | | | .3537 | .1857 | .2789 | .1475 | | .1518 | | .0729 | | | | | |
| 326.000 | | | .2736 | .2059 | .4475 | .2924 | | .0351 | | .0261 | .1025 | -.0441 | -.0665 | -.0575 | -.0401 |
| 340.000 | | | .2534 | .3035 | .4288 | .3895 | | .0391 | | -.0102 | | | | | |

| X/LB | .0520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0634 | .1754 | .4237 | .2947 | -.1481 | -.2269 | -.2068 | | -.1186 | -.0965 |
| 40.000 | -.0681 | .0583 | .2066 | -.0543 | -.1945 | -.1481 | -.1909 | | -.2228 | -.1936 |
| 70.000 | .0317 | -.0187 | -.0215 | .0355 | .0000 | .0571 | .0331 | | | |
| 90.000 | .0358 | .0297 | -.0007 | .1492 | .0896 | .0592 | .0280 | | | |
| 105.000 | | | .0000 | .2022 | .0926 | .0035 | -.0284 | | | |
| 110.000 | | | | | | | | -.0715 | | |
| 120.000 | -.0051 | .0304 | .0386 | .2408 | .2241 | .0749 | -.0076 | -.0780 | | |
| 135.000 | | | .1994 | .2623 | .2148 | .0681 | .0219 | | | |
| 150.000 | -.0084 | .0017 | .2005 | .2275 | .0510 | .1626 | .1857 | | | |
| 165.000 | -.0054 | | .1547 | | .4053 | .3458 | -.0209 | | | |
| 180.000 | -.0084 | -.0088 | .0895 | .2101 | | | | | | |
| 320.000 | .0777 | .0454 | .3748 | .1278 | -.0699 | -.1722 | -.1987 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB41)

ALPHA0( 2) = -4.302 BETA0 ( 2) = -.140

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE (

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1860 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5124 | .0339 | .2367 | .2232 | .6065 | .4432 | | .0610 | | .0004 | .2417 | -.0221 | -.0137 | -.0821 | .0612 |
| 20.000 | | | .2819 | .2249 | .6368 | .4615 | | .0681 | | .0274 | | | | | |
| 40.000 | | | .4125 | .2199 | .4139 | .2732 | | .2025 | | -.0330 | .0905 | -.0032 | .0193 | .0713 | .0272 |
| 55.000 | | | .5062 | .2384 | .2727 | .3386 | | .3275 | | .1871 | | | | | |
| 70.000 | | | .5511 | .3107 | .2128 | .2200 | | .3315 | | .2548 | .0371 | .0122 | .0076 | -.0347 | |
| 90.000 | | .7798 | .5933 | .3757 | .2461 | .2170 | | .2922 | | .0030 | .0991 | .0180 | -.0311 | -.0374 | |
| 120.000 | | | .6415 | .4815 | .3501 | .2962 | | .4012 | | .2897 | .0918 | -.0841 | -.0317 | -.0060 | |
| 140.000 | | | | | | | | | | .2097 | | | | | |
| 150.000 | | | .6239 | .4885 | .4215 | .3689 | | | | .1465 | -.0872 | -.0457 | -.0127 | .0207 | |
| 151.000 | | | | | | | | | .8756 | | | | | | |
| 156.000 | | | | | | | | .9957 | | | | | | | |
| 162.000 | | | | | | | | | 1.0999 | | | | | | |
| 165.000 | | | | | | | | | | .1073 | -.0953 | -.0291 | .0020 | .0268 | |
| 169.000 | | | | | | | | 1.2902 | | | | | | | |
| 174.000 | | | | | | | 1.0416 | | | | | | | | |
| 300.000 | 1.5824 | .0453 | .5867 | .4835 | .4348 | .3938 | | 1.3031 | | -.0096 | -.0869 | -.0421 | .0103 | .0302 | |
| 305.000 | | | .4700 | .1933 | .3197 | .2423 | | .2715 | | .1580 | | | | | |
| 320.000 | | | .3518 | .2212 | .5328 | .2746 | | .1491 | | .0115 | .1822 | -.0154 | -.0307 | .0210 | -.0131 |
| 340.000 | | | .2875 | .2182 | .5767 | .3918 | | .0554 | | .0730 | | | | | |

| X/LB | .0520 | .7280 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| P | | | | | | | | | | |
| .000 | .0084 | .1813 | .3958 | .3747 | -.1372 | -.2221 | -.1443 | | -.0860 | -.1057 |
| 40.000 | -.0440 | .1258 | .2787 | -.0413 | -.2003 | -.1273 | -.1732 | | -.0905 | -.1101 |
| 70.000 | .0180 | -.0223 | -.0419 | .0721 | .0000 | .0178 | -.0063 | | | |
| 90.000 | .0207 | .0149 | -.0215 | .1179 | .0406 | .0126 | -.0056 | | | |
| 105.000 | | | .0003 | .1510 | .0082 | -.0420 | -.0637 | | | |
| 110.000 | | | | | | | | -.1011 | | |
| 120.000 | -.0076 | .0257 | .0745 | .1819 | .1648 | .0270 | -.0515 | -.1069 | | |
| 135.000 | | | .0998 | .2658 | .1659 | .0447 | .0335 | | | |
| 150.000 | .0139 | .0096 | .0345 | .2648 | .1747 | .1430 | .1243 | | | |
| 165.000 | .0159 | | .0089 | | .3423 | .2347 | -.0783 | | | |
| 180.000 | .0173 | .0117 | .0089 | .3464 | | | | | | |
| 320.000 | .0180 | .1533 | .3118 | .1399 | -.1269 | -.1388 | -.1990 | | | |

ARC97-019 IA81 LVAP(ALLMI. SEALED) ORB. FUSELAGE (RE=841)

ALPHA0( 2) = -4.281 BETA0 ( 3) = 3.415

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5871 | .8480 | .2331 | .2386 | .4845 | .4988 | | .0141 | | .0885 | .1563 | .0079 | -.0813 | .0074 | -.0818 |
| 20.000 | | | .2422 | .2120 | .4202 | .3621 | | .0292 | | -.0258 | | | | | |
| 40.000 | | | .3186 | .2160 | .4505 | .2842 | | .0852 | | -.0068 | .0614 | .0247 | -.0119 | .0191 | .0088 |
| 55.000 | | | .3783 | .1702 | .1817 | .1520 | | .2445 | | .1115 | | | | | |
| 70.000 | | | .4148 | .2029 | .1676 | .1699 | | .1725 | | .1962 | .0008 | -.0395 | -.0273 | -.0533 | |
| 90.000 | | .6174 | .4560 | .2696 | .1758 | .1399 | | .1442 | | .0000 | .0439 | -.0296 | -.0700 | -.0390 | |
| 120.000 | | | .5139 | .3854 | .2690 | .2249 | | .3105 | | .1923 | -.0251 | -.1391 | -.0443 | -.0353 | |
| 140.000 | | | | | | | | | | .1260 | | | | | |
| 150.000 | | | .5477 | .4545 | .3911 | .3277 | | | | .0937 | -.1132 | -.0537 | -.0273 | .0071 | |
| 151.000 | | | | | | | | | .7164 | | | | | | |
| 156.000 | | | | | | | | .9236 | | | | | | | |
| 162.000 | | | | | | | | | 1.0216 | | | | | | |
| 165.000 | | | | | | | | | | .0543 | -.0961 | -.0443 | -.0039 | .0050 | |
| 169.000 | | | | | | | | 1.1723 | | | | | | | |
| 174.000 | | | | | | | .9899 | | | | | | | | |
| 180.000 | 1.5871 | .8961 | .5752 | .4868 | .4385 | .3941 | | 1.2484 | | -.0096 | -.0934 | -.0109 | -.0023 | -.0042 | |
| 305.000 | | | .5872 | .3066 | .3796 | .4818 | | .3542 | | .2226 | | | | | |
| 320.000 | | | .4268 | .2692 | .7569 | .2964 | | .2219 | | .0341 | .1687 | .0014 | -.0240 | .0857 | .0183 |
| 340.000 | | | .3130 | .2514 | .6122 | .5082 | | -.0598 | | .1236 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0681 | .1184 | .3285 | .3818 | -.1443 | -.1316 | -.1252 | | -.0914 | -.0948 |
| 40.000 | .0050 | .0833 | .4088 | .0369 | -.1832 | -.1460 | -.1571 | | -.0972 | -.1019 |
| 70.000 | .0030 | -.0491 | -.0577 | .0393 | .0000 | -.0016 | -.0300 | | | |
| 90.000 | -.0052 | -.0031 | -.0310 | .1131 | -.0115 | -.0142 | -.0242 | | | |
| 105.000 | | | .0000 | .0642 | -.0422 | -.0780 | -.0935 | | | |
| 110.000 | | | | | | | | -.1228 | | |
| 120.000 | -.0569 | -.0276 | .0875 | .0845 | .0834 | -.0378 | -.0908 | -.1473 | | |
| 135.000 | | | .0007 | .2022 | .0944 | .0105 | -.0181 | | | |
| 150.000 | -.0168 | -.0204 | -.0198 | .2347 | .1282 | .0408 | .0318 | | | |
| 165.000 | -.0110 | | .0004 | | .2272 | .1350 | -.1262 | | | |
| 180.000 | .0013 | -.0088 | .0765 | .2388 | | | | | | |
| 320.000 | .0061 | .1441 | .3483 | -.0883 | -.1651 | -.1449 | -.1667 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET841)

ALPHAO( 3) = -.145 BETAO ( 1) = -6.442

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | 2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| 000 | 1.4256 | .7856 | .3067 | .6252 | .3365 | .3550 | | .0659 | | .0796 | 0100 | .0532 | -.0035 | -.0219 | .0416 |
| 20.000 | | | .2993 | .6980 | .5461 | .3340 | | -.0182 | | .1484 | | | | | |
| 40.000 | | | .5293 | .6950 | .7677 | .3313 | | .3060 | | .0522 | .0690 | -.0332 | .0062 | .1148 | .0003 |
| 55.000 | | | .6694 | .5381 | .7884 | .4907 | | .2967 | | .2406 | | | | | |
| 70.000 | | | .7087 | .4680 | .6302 | .5247 | | .3341 | | .2432 | .0478 | .0390 | .0360 | -.0112 | |
| 90.000 | | .9087 | .7257 | .4997 | .4640 | .5187 | | .3788 | | .0000 | .0832 | .0490 | .0149 | -.0178 | |
| 120.000 | | | .7110 | .5374 | .3921 | .4045 | | .4142 | | .4334 | .1432 | -.0412 | -.0680 | -.0680 | |
| 140.000 | | | | | | | | | | .4230 | | | | | |
| 150.000 | | | .5105 | .4389 | .3718 | .3388 | | | | .2488 | -.1070 | -.0937 | -.0780 | -.0672 | |
| 151.000 | | | | | | | | | .9852 | | | | | | |
| 156.000 | | | | | | | | 1.0355 | | | | | | | |
| 162.000 | | | | | | | | | 1.0935 | | | | | | |
| 165.000 | | | | | | | | | | .0653 | -.0892 | -.0887 | -.0904 | -.0665 | |
| 169.000 | | | | | | | | 1.0911 | | | | | | | |
| 174.000 | | | | | | | .8525 | | | | | | | | |
| 180.000 | 1.4256 | .8036 | .4721 | .3668 | .3171 | .2888 | | 1.0005 | | -.0113 | -.1377 | -.0970 | -.0753 | -.0675 | |
| 305.000 | | | .2348 | .2674 | .2354 | .0713 | | .0289 | | .0177 | | | | | |
| 320.000 | | | .2461 | .4079 | .2679 | .2135 | | -.0395 | | -.0595 | .0262 | -.0887 | -.1338 | -.0774 | -.0771 |
| 340.000 | | | .2846 | .5310 | .2658 | .2648 | | .0138 | | -.0075 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0232 | .2570 | .4563 | .3119 | -.1311 | -.2262 | -.1903 | | -.0993 | -.0870 |
| 40.000 | -.0518 | .0825 | .2068 | -.1201 | -.1708 | -.0942 | -.1480 | | -.1921 | -.2234 |
| 70.000 | .0085 | -.0392 | -.0513 | -.0503 | .0000 | .0347 | .0107 | | | |
| 90.000 | .0092 | -.0027 | -.0335 | .0072 | .0737 | .0443 | .0043 | | | |
| 105.000 | | | .0000 | .1585 | .1144 | .0094 | -.0312 | | | |
| 110.000 | | | | | | | | -.0789 | | |
| 120.000 | -.0658 | -.0513 | -.0619 | .1458 | .1496 | .0527 | -.0029 | -.0659 | | |
| 135.000 | | | .0969 | .1346 | .1325 | .0213 | -.0100 | | | |
| 150.000 | -.0685 | -.0554 | .1281 | .0918 | -.0569 | .0216 | .0227 | | | |
| 165.000 | -.0699 | | .1209 | | .3106 | .2963 | -.0250 | | | |
| 180.000 | -.0702 | -.0654 | .0949 | .0607 | | | | | | |
| 320.000 | .1050 | .0466 | .4443 | .1766 | -.0562 | -.1426 | -.1603 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET841)

ALPHAO( 3) = -.137 BETAO ( 2) = -4.372

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .4870 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4702 | .7930 | .3630 | .6049 | .2541 | .3629 | | .0512 | | .0569 | .1089 | .0159 | .0273 | -.0869 | .0052 |
| 20.000 | | | .3704 | .6492 | .4072 | .3700 | | -.0389 | | .1187 | | | | | |
| 40.000 | | | .4888 | .6339 | 6036 | .2872 | | .2783 | | .0256 | .0750 | -.0398 | .0004 | .0938 | -.0124 |
| 55.000 | | | .5945 | .4874 | .6176 | .4295 | | .2902 | | .2058 | | | | | |
| 70.000 | | | .6343 | .4186 | .4661 | .4658 | | .3042 | | .2184 | .0226 | .0189 | .0114 | -.0389 | |
| 90.000 | | .8272 | .6555 | .4439 | .3700 | .4741 | | .3464 | | .0000 | .0656 | .0290 | -.0149 | -.0446 | |
| 120.000 | | | .6591 | .4978 | .3626 | .3774 | | .4291 | | .4008 | .1267 | -.0639 | -.0789 | -.0672 | |
| 140.000 | | | | | | | | | | .3875 | | | | | |
| 150.000 | | | .5882 | .4309 | .3670 | .3208 | | | | .2204 | -.0955 | -.0802 | -.0789 | -.0471 | |
| 151.000 | | | | | | | | | .9123 | | | | | | |
| 155.000 | | | | | | | | .9458 | | | | | | | |
| 162.000 | | | | | | | | | 1.0373 | | | | | | |
| 165.000 | | | | | | | | | | .0844 | -.0915 | -.0825 | -.0652 | -.0457 | |
| 169.000 | | | | | | | | 1.0410 | | | | | | | |
| 174.000 | | | | | | | .8189 | | | | | | | | |
| 180.000 | 1.4702 | .8123 | .4818 | .3818 | .3343 | .3027 | | 1.0430 | | -.0250 | -.1318 | -.0619 | -.0526 | -.0481 | |
| 305.000 | | | .3031 | .3112 | .2821 | .1044 | | .1124 | | .0364 | | | | | |
| 320.000 | | | .3159 | .4399 | .3171 | .2357 | | .0243 | | .0032 | .0727 | -.0715 | -.1078 | -.0813 | -.0583 |
| 340.000 | | | .3502 | .5294 | .2444 | .2559 | | .0416 | | -.0324 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0463 | .1770 | .4645 | .3063 | -.1260 | -.2247 | -.1606 | | -.0465 | -.0891 |
| 40.000 | -.0121 | .1050 | .2645 | -.0511 | -.1658 | -.1361 | -.1307 | | -.1972 | -.1664 |
| 70.000 | -.0118 | -.0575 | -.0583 | -.0392 | .0000 | .0142 | -.0042 | | | |
| 90.000 | -.0080 | -.0155 | -.0355 | .0980 | .0523 | .0176 | -.0114 | | | |
| 105.000 | | | .0000 | .1453 | .0720 | -.0209 | -.0470 | | | |
| 110.000 | | | | | | | | -.0900 | | |
| 120.000 | -.0501 | -.0205 | -.0018 | .1601 | .1879 | .0378 | -.0270 | -.0870 | | |
| 135.000 | | | .1535 | .1652 | .1615 | .0259 | -.0181 | | | |
| 150.000 | -.0454 | -.0297 | .1637 | .1452 | -.0078 | .0581 | .1029 | | | |
| 165.000 | -.0437 | | .1439 | | .2948 | .2670 | -.0334 | | | |
| 180.000 | -.0426 | -.0426 | .1130 | .1339 | | | | | | |
| 320.000 | .0687 | .0541 | .4081 | .1873 | -.0688 | -.1433 | -.1785 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB41)

ALPHAO( 3) = -.130 BETAO ( 3) = -.178

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4208 | .7760 | .3986 | .4867 | .3607 | .2417 | | .0538 | | -.0349 | .2000 | -.0231 | -.0480 | -.1292 | .0277 |
| 20.000 | | | .3452 | .4877 | .4611 | .2568 | | .0617 | | .0064 | | | | | |
| 40.000 | | | .3581 | .4458 | .5356 | .1415 | | .1906 | | -.0369 | .0547 | -.0201 | -.0048 | .0312 | -.0256 |
| 55.000 | | | .4414 | .3208 | .4578 | .2447 | | .2597 | | .1440 | | | | | |
| 70.000 | | | .4728 | .2620 | .2721 | .2918 | | .2402 | | .1807 | -.0090 | -.0258 | -.0354 | -.0747 | |
| 90.000 | | .6720 | .5033 | .3107 | .2187 | .2319 | | .2908 | | .0000 | .0346 | -.0161 | -.0620 | -.0753 | |
| 120.000 | | | .5365 | .3976 | .2740 | .2330 | | .3738 | | .3144 | .0658 | -.1079 | -.0850 | -.0514 | |
| 140.000 | | | | | | | | | | .2272 | | | | | |
| 150.000 | | | .5123 | .3903 | .3291 | .2783 | | | | .1144 | -.1050 | -.0827 | -.0594 | -.0212 | |
| 151.000 | | | | | | | | | .7509 | | | | | | |
| 156.000 | | | | | | | | .8186 | | | | | | | |
| 162.000 | | | | | | | | | .9908 | | | | | | |
| 165.000 | | | | | | | | | | .0514 | -.1282 | -.0564 | -.0367 | -.0171 | |
| 169.000 | | | | | | | | 1.1036 | | | | | | | |
| 174.000 | | | | | | | .8642 | | | | | | | | |
| 180.000 | 1.4268 | .7919 | .4675 | .3758 | .3375 | .2978 | | 1.1181 | | -.0450 | -.1251 | -.0743 | -.0194 | -.0141 | |
| 305.000 | | | .4765 | .3872 | .3960 | .1587 | | .2316 | | .1114 | | | | | |
| 320.000 | | | .5223 | .4382 | .3842 | .1792 | | .1195 | | .0050 | .1477 | -.0613 | -.0517 | -.0161 | -.0212 |
| 340.000 | | | .4788 | .4625 | .3240 | .2027 | | .0392 | | .0544 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0188 | .2049 | .3507 | .3061 | -.1321 | -.1998 | -.1309 | | -.0811 | -.1007 |
| 40.000 | -.0470 | .1424 | .2608 | .0092 | -.1869 | -.1175 | -.1630 | | -.0926 | -.1085 |
| 70.000 | -.0331 | -.0679 | -.0780 | .0197 | .0000 | -.0242 | -.0438 | | | |
| 90.000 | -.0233 | -.0243 | -.0579 | .0613 | .0013 | -.0225 | -.0407 | | | |
| 105.000 | | | .0000 | .1052 | -.0181 | -.0678 | -.0861 | | | |
| 110.000 | | | | | | | | -.1217 | | |
| 120.000 | -.0446 | -.0099 | .1154 | .1330 | .1357 | .0091 | -.0655 | -.1210 | | |
| 135.000 | | | .0923 | .1905 | .1258 | .0162 | -.0075 | | | |
| 150.000 | -.0287 | -.0310 | -.0191 | .1986 | .0568 | .0731 | .0826 | | | |
| 165.000 | -.0245 | | -.0327 | | .2701 | .1609 | -.1024 | | | |
| 180.000 | -.0239 | -.0283 | -.0320 | .2793 | | | | | | |
| 320.000 | .0372 | .1995 | .3579 | .1377 | -.1171 | -.1414 | -.2054 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (REF841)

ALPHAO( 3) = -.117 BETAO ( 4) = 3.384

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4739 | .7717 | .1985 | .6378 | .3480 | .4106 | | .0294 | | .0300 | .1010 | -.0496 | -.0987 | -.0306 | -.1125 |
| 20.000 | | | .2002 | .5654 | .3251 | .3044 | | .0490 | | -.0680 | | | | | |
| 40.000 | | | .2632 | .4746 | .3932 | .1634 | | .0906 | | -.0350 | .0375 | -.0146 | -.0493 | -.0283 | -.0112 |
| 55.000 | | | .3087 | .2308 | .3642 | .0794 | | .1829 | | .0676 | | | | | |
| 70.000 | | | .3370 | .1870 | .1779 | .1688 | | .1816 | | .1359 | -.0429 | -.0671 | -.0607 | -.1011 | |
| 90.000 | | .5436 | .3747 | .2102 | .1428 | .1401 | | .1063 | | .0000 | .0089 | -.0580 | -.0894 | -.0847 | |
| 120.000 | | | .4234 | .3059 | .1998 | .1607 | | .2669 | | .1804 | -.0240 | -.1298 | -.0817 | -.0503 | |
| 140.000 | | | | | | | | | | .0846 | | | | | |
| 150.000 | | | .4391 | .3450 | .2899 | .2346 | | | | .0560 | -.1383 | -.0830 | -.0570 | -.0309 | |
| 151.000 | | | | | | | | | .6107 | | | | | | |
| 156.000 | | | | | | | | .8145 | | | | | | | |
| 162.000 | | | | | | | | | .8903 | | | | | | |
| 165.000 | | | | | | | | | | .0042 | -.1245 | -.0753 | -.0409 | -.0275 | |
| 169.000 | | | | | | | | 1.0077 | | | | | | | |
| 174.000 | | | | | | | .8369 | | | | | | | | |
| 180.000 | 1.4799 | .7774 | .4810 | .3693 | .3287 | .3999 | | 1.0748 | | -.0415 | -.1259 | -.0586 | -.0470 | -.0357 | |
| 305.000 | | | .5529 | .3656 | .6658 | .4182 | | .2749 | | .1891 | | | | | |
| 320.000 | | | .3925 | .3474 | .6968 | .2393 | | .2213 | | .0035 | .1357 | -.0546 | -.0510 | .0565 | -.0064 |
| 340.000 | | | .2743 | .6087 | .4980 | .3925 | | -.0627 | | .0923 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | 9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0462 | .1759 | .3287 | .3454 | -.1563 | -.1488 | -.1297 | | -.0986 | -.1027 |
| 40.000 | -.0040 | .0902 | .3959 | .0625 | -.1716 | -.1406 | -.1735 | | -.1010 | -.1037 |
| 70.000 | -.0513 | -.0859 | -.0921 | -.0020 | .0000 | -.0506 | -.0695 | | | |
| 90.000 | -.0544 | -.0486 | -.0662 | .0300 | -.0346 | -.0377 | -.0501 | | | |
| 105.000 | | | .0000 | .0242 | -.0987 | -.0973 | -.1113 | | | |
| 110.000 | | | | | | | | -.1395 | | |
| 120.000 | -.0867 | -.0717 | .0311 | .0629 | .0605 | -.0518 | -.1059 | -.1531 | | |
| 135.000 | | | -.0157 | .1457 | .0598 | -.0188 | -.0525 | | | |
| 150.000 | -.0498 | -.0549 | .0007 | .1491 | .0884 | -.0049 | -.0219 | | | |
| 165.000 | -.0469 | | .0618 | | .1362 | .0614 | -.1344 | | | |
| 180.000 | -.0398 | -.0471 | .1031 | .1583 | | | | | | |
| 320.000 | .0272 | .1515 | .3321 | -.0602 | -.1638 | -.1630 | -.1402 | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB41)

ALPHAO( 3) = -.112 BETAO ( 5) = 6.096

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4380 | .7823 | .2960 | .6939 | .2809 | .2243 | | .0500 | | .0609 | .0899 | -.0562 | -.1484 | -.0671 | -.0861 |
| 20.000 | | | .2879 | .6060 | .2049 | .1863 | | -.0043 | | -.0512 | | | | | |
| 40.000 | | | .2320 | .4981 | .2277 | .1775 | | .0187 | | -.0448 | .0516 | -.0327 | -.0728 | -.0574 | -.0457 |
| 55.000 | | | .2553 | .2422 | .2372 | .0574 | | .0866 | | .0400 | | | | | |
| 70.000 | | | .2815 | .2022 | .1857 | .1028 | | .0816 | | .1112 | -.0508 | -.0821 | -.0738 | -.1068 | |
| 90.000 | | .4861 | .3262 | .1665 | .1339 | .1018 | | .0769 | | .0000 | .0002 | -.0714 | -.1058 | -.0891 | |
| 120.000 | | | .3811 | .2624 | .1587 | .1284 | | [illegible] | | .1249 | -.0569 | -.1744 | -.0864 | -.0774 | |
| 140.000 | | | | | | | | | | .0426 | | | | | |
| 150.000 | | | .4078 | .3226 | .2667 | .2156 | | | | .0281 | -.1476 | -.0901 | -.0691 | -.0518 | |
| 151.000 | | | | | | | | | .5714 | | | | | | |
| 156.000 | | | | | | | | .8084 | | | | | | | |
| 162.000 | | | | | | | | | .8797 | | | | | | |
| 165.000 | | | | | | | | | | -.0532 | -.1294 | -.0778 | -.0591 | -.0667 | |
| 169.000 | | | | | | | | 1.0340 | | | | | | | |
| 174.000 | | | | | | | .8283 | | | | | | | | |
| 180.000 | 1.4300 | .7634 | .4602 | .3680 | .3236 | .2956 | | 1.0446 | | -.0276 | -.1298 | -.0761 | -.0701 | -.0616 | |
| 305.000 | | | .6238 | .5534 | .6673 | .4654 | | .2722 | | .2202 | | | | | |
| 320.000 | | | .4215 | .7618 | .6148 | .2610 | | .2781 | | .0526 | .1121 | -.0381 | -.0318 | -.0100 | -.0001 |
| 340.000 | | | .3155 | .7379 | .4172 | .2946 | | -.0335 | | .1262 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.1558 | .0713 | .3417 | .3495 | -.1894 | -.1278 | -.1206 | | -.0791 | -.0872 |
| 40.000 | .0264 | .1104 | .3506 | .1177 | -.1594 | -.1380 | -.1451 | | -.0916 | -.0994 |
| 70.000 | -.0535 | -.0829 | -.0947 | -.0276 | .0000 | -.0525 | -.0745 | | | |
| 90.000 | -.0586 | -.0487 | -.0712 | .0543 | -.0521 | -.0678 | -.0717 | | | |
| 105.000 | | | .0000 | .0297 | - 0899 | -.1114 | -.1227 | | | |
| 110.000 | | | | | | | | -.1471 | | |
| 120.000 | -.1000 | -.0848 | .0587 | .0061 | .0208 | -.0892 | -.1400 | -.1672 | | |
| 135.000 | | | .0529 | .0920 | .0249 | -.0456 | -.0728 | | | |
| 150.000 | -.0681 | -.0719 | .0498 | .1141 | .0661 | -.0483 | -.0697 | | | |
| 165.000 | -.0654 | | .0693 | | .0876 | .0257 | -.1465 | | | |
| 180.000 | -.0647 | -.0603 | .1013 | .0865 | | | | | | |
| 320.000 | -.0188 | .1671 | .2882 | -.1025 | -.1577 | -.1376 | -.1261 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB41)

ALPHAO( ) = 3.395 BETAO ( ) = -4.359

SECTION ( )ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3644 | .8217 | .6450 | .5106 | .1374 | .2170 | | .0725 | | .0201 | .0964 | -.0200 | -.0175 | -.0599 | -.0053 |
| 20.000 | | | .6783 | .5982 | .2997 | .2231 | | -.0426 | | .0860 | | | | | |
| 40.000 | | | .7095 | .6702 | .5449 | .2285 | | .2697 | | .0144 | -.0116 | -.0769 | -.0189 | .0438 | .0114 |
| 55.000 | | | .6802 | .6176 | .5879 | .3734 | | .2400 | | .1527 | | | | | |
| 70.000 | | | .6351 | .5179 | .4996 | .3976 | | .2350 | | .1640 | -.0224 | -.0220 | -.0309 | -.0332 | |
| 90.000 | | .7819 | .6155 | .4623 | .4233 | .3959 | | .2657 | | .0000 | .0234 | -.0052 | -.0482 | -.0719 | |
| 120.000 | | | .5826 | .4353 | .3262 | .3249 | | .2853 | | .3226 | .0813 | -.0816 | -.1179 | -.1299 | |
| 140.000 | | | | | | | | | | .3259 | | | | | |
| 150.000 | | | .4916 | .3364 | .2824 | .2484 | | | | .1846 | -.1358 | -.1319 | -.1206 | -.0914 | |
| 151.000 | | | | | | | | | .8076 | | | | | | |
| 156.000 | | | | | | | | .8102 | | | | | | | |
| 162.000 | | | | | | | | | .9279 | | | | | | |
| 165.000 | | | | | | | | | | .0271 | -.1267 | -.1226 | -.1106 | -.0869 | |
| 169.000 | | | | | | | | .8866 | | | | | | | |
| 174.000 | | | | | | | .6671 | | | | | | | | |
| 180.000 | 1.3644 | .6832 | .3801 | .2815 | .2453 | .2127 | | .8730 | | -.0520 | -.1603 | -.1022 | -.0926 | -.0778 | |
| 305.000 | | | .4408 | .2771 | .2194 | .0759 | | .0854 | | .0059 | | | | | |
| 320.000 | | | .5619 | .4029 | .2120 | .1271 | | .0217 | | -.0180 | .0534 | -.0976 | -.1389 | -.0679 | -.0155 |
| 340.000 | | | .6426 | .4479 | .1254 | .1075 | | .0147 | | -.0533 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0815 | .3051 | .5048 | .4599 | -.1006 | -.2154 | -.1233 | | -.0449 | -.0757 |
| 40.000 | .0812 | .1356 | .3134 | -.0138 | -.1514 | -.1204 | -.1240 | | -.1740 | -.1513 |
| 70.000 | -.0356 | -.0823 | -.0903 | -.0863 | .0000 | -.0162 | -.0383 | | | |
| 90.000 | -.0356 | -.0481 | -.0706 | -.0522 | .0465 | .0002 | -.0434 | | | |
| 105.000 | | | .0000 | .1054 | .0771 | -.0277 | -.0720 | | | |
| 110.000 | | | | | | | | -.1168 | | |
| 120.000 | -.1114 | -.0982 | -.0061 | .0870 | .1221 | .0072 | -.0431 | -.1015 | | |
| 135.000 | | | .0848 | .0643 | .0870 | -.0149 | -.0536 | | | |
| 150.000 | -.0706 | -.0583 | .0754 | .0663 | -.0659 | -.0434 | -.0244 | | | |
| 165.000 | -.0718 | | .0856 | | .1749 | .1591 | -.0842 | | | |
| 180.000 | -.0747 | -.0661 | .0808 | .0751 | | | | | | |
| 320.000 | .0424 | .1204 | .5678 | .2447 | -.0741 | -.1195 | -.1715 | | | |

ARC97-019 IA81 LVA[illegible](ALLHL SEALED) ORB. FUSELAGE (RETB41)

ALPHA0( 4) = 3.403 BETA0 ( 2) = -.170

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2799 | .9199 | .8712 | .5369 | .0728 | .0981 | | .0074 | | .0547 | .1544 | -.0343 | -.0748 | -.0678 | .0403 |
| 20.300 | | | .6642 | .5596 | .1266 | .1022 | | -.0290 | | .0073 | | | | | |
| 40.000 | | | .6127 | .5342 | .2973 | .1838 | | .1873 | | -.0433 | -.0262 | -.0393 | -.0642 | -.0195 | -.0343 |
| 55.000 | | | .5535 | .4229 | .3343 | .2627 | | .1850 | | .1110 | | | | | |
| 70.000 | | | .5106 | .3656 | .3057 | .2239 | | .1866 | | .1110 | -.0397 | -.0595 | -.0765 | -.0942 | |
| 90.000 | | .6127 | .4887 | .3326 | .2626 | .2192 | | .2270 | | .0000 | -.0165 | -.0431 | -.0879 | -.1129 | |
| 120.000 | | | .4664 | .3384 | .2310 | .2084 | | .3383 | | .2439 | .0333 | -.1222 | -.1246 | -.1019 | |
| 140.000 | | | | | | | | | | .2203 | | | | | |
| 150.000 | | | .4175 | .3010 | .2475 | .2094 | | | | .0908 | -.1325 | -.1216 | -.0992 | -.0619 | |
| 151.000 | | | | | | | | | .6492 | | | | | | |
| 156.000 | | | | | | | | .6729 | | | | | | | |
| 162.000 | | | | | | | | | .8554 | | | | | | |
| 165.000 | | | | | | | | | | .0118 | -.1503 | -.0989 | -.0725 | -.0571 | |
| 169.000 | | | | | | | | .8943 | | | | | | | |
| 174.000 | | | | | | | .6737 | | | | | | | | |
| 180.000 | 1.2799 | .6433 | .3659 | .2869 | .2529 | .2202 | | .9289 | | -.0726 | -.1517 | -.0982 | -.0582 | -.0537 | |
| 305.000 | | | .5505 | .3889 | .2647 | .1710 | | .1830 | | .0908 | | | | | |
| 320.000 | | | .6609 | .5066 | .1851 | .1325 | | .1090 | | -.0595 | .0949 | -.0828 | -.0572 | -.0418 | -.0370 |
| 340.000 | | | .7042 | .5006 | .0705 | .0850 | | -.0160 | | .0468 | | | | | |

| X/LB | .0520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1076 | .2294 | .3635 | .2794 | -.1583 | -.1878 | -.1171 | | -.0750 | -.1059 |
| 40.000 | .0073 | .1940 | .2907 | .0833 | -.1738 | -.1494 | -.1606 | | -.1447 | -.1056 |
| 70.000 | -.0812 | -.0955 | -.1101 | -.0195 | .0000 | -.0613 | -.0769 | | | |
| 90.000 | -.0482 | -.0550 | -.0831 | .0310 | -.0286 | -.0500 | -.0817 | | | |
| 105.000 | | | .0000 | .0505 | -.0313 | -.0862 | -.1092 | | | |
| 110.000 | | | | | | | | -.1426 | | |
| 120.000 | -.0527 | -.0359 | .0854 | .0[illegible]2 | .0779 | -.0229 | -.0854 | -.1310 | | |
| 135.000 | | | .0808 | .1185 | .0803 | -.0096 | -.037[illegible] | | | |
| 150.000 | -.0700 | -.0516 | .0464 | .1584 | .0376 | .0502 | .0376 | | | |
| 165.000 | -.0870 | | -.0513 | | .2332 | .1165 | -.0922 | | | |
| 180.000 | -.0838 | -.0853 | -.0564 | .2305 | | | | | | |
| 320.000 | .0574 | .1918 | .4700 | .1096 | -.0941 | -.1381 | -.1817 | | | |

ARC97-018 1A81 LVAP(ALLHL SEALED) CRB. FUSELAGE (RETB41)

ALPHAO( 4) = 3.411 BETAO ( 3) = 3.387

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3074 | .7792 | .6738 | .4973 | .1173 | .1661 | | .0173 | | -.0032 | .0788 | -.1011 | -.1143 | -.0299 | -.1051 |
| 20.000 | | | .6366 | .4569 | .1018 | .0997 | | .0015 | | -.0868 | | | | | |
| 40.000 | | | .5418 | .4373 | .2008 | .1368 | | .0652 | | -.0855 | .0214 | -.0362 | -.0950 | -.0488 | .0253 |
| 55.000 | | | .4497 | .3410 | .2207 | .0649 | | .1322 | | .0269 | | | | | |
| 70.000 | | | .3750 | .2894 | .2247 | .0804 | | .1675 | | .0825 | -.0745 | -.0947 | -.0906 | -.1307 | |
| 90.000 | | .4584 | .3335 | .2530 | .1924 | .1159 | | .1105 | | .0000 | -.0325 | -.0846 | -.1133 | -.1240 | |
| 120.000 | | | .3338 | .2483 | .1688 | .1499 | | .2122 | | .1243 | -.0220 | -.1561 | -.1244 | -.0916 | |
| 140.000 | | | | | | | | | | .0638 | | | | | |
| 150.000 | | | .3359 | .2530 | .2103 | .1712 | | | | .0338 | -.1597 | -.1173 | -.0779 | -.0643 | |
| 151.000 | | | | | | | | | .5412 | | | | | | |
| 156.000 | | | | | | | | .6663 | | | | | | | |
| 162.000 | | | | | | | | | .7923 | | | | | | |
| 165.000 | | | | | | | | | | -.0298 | -.1506 | -.1050 | -.0699 | -.0643 | |
| 169.000 | | | | | | | | .8519 | | | | | | | |
| 174.000 | | | | | | | .8618 | | | | | | | | |
| 180.000 | 1.3074 | .8422 | .3815 | .2749 | .2383 | .2093 | | .9161 | | -.0705 | -.1543 | -.0980 | -.0846 | -.0694 | |
| 305.000 | | | .6691 | .5593 | .4916 | .3530 | | .2215 | | .1402 | | | | | |
| 320.000 | | | .7245 | .6377 | .4212 | .2076 | | .2149 | | -.0008 | .0284 | -.0826 | -.0766 | -.0023 | -.0261 |
| 340.000 | | | .7265 | .5567 | .2404 | .1648 | | -.0728 | | .0644 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9800 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0083 | .2031 | .3522 | .3775 | -.1439 | -.1190 | -.1414 | | -.0948 | -.1038 |
| 40.000 | -.0023 | .1068 | .4647 | .0976 | -.1531 | -.1108 | -.1615 | | -.1031 | -.1051 |
| 70.000 | -.0772 | -.1051 | -.1120 | -.0280 | .0000 | -.0770 | -.0955 | | | |
| 90.000 | -.0738 | -.0755 | -.0973 | -.0075 | -.0568 | -.0623 | -.0785 | | | |
| 105.000 | | | .0000 | .0133 | -.0957 | -.1193 | -.1319 | | | |
| 110.000 | | | | | | | | -.1567 | | |
| 120.000 | -.1079 | -.0618 | .0082 | .0470 | .0596 | -.0489 | -.1217 | -.1652 | | |
| 135.000 | | | .0665 | .1132 | .0565 | -.0451 | -.0625 | | | |
| 150.000 | -.0833 | -.0837 | .0696 | .0695 | .0261 | -.0356 | -.0545 | | | |
| 165.000 | -.0803 | | .0788 | | .0565 | .0066 | -.1411 | | | |
| 180.000 | -.0743 | -.0703 | .0761 | .0924 | | | | | | |
| 320.000 | .0403 | .1986 | .3287 | .0074 | -.1541 | -.1281 | -.1414 | | | |

ARC97-019 IA81 LVAP(ALUM SEALED) ORB. FUSELAGE (RETB41)

ALPHAO( 5) = 6.079 BETAO ( 1) = -.145

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2407 | 1.0076 | .7466 | .4305 | .0374 | .0898 | | .0197 | | .0969 | .1378 | -.0429 | -.0833 | -.0293 | .0533 |
| 20.000 | | | .7579 | .4734 | .0415 | .0942 | | -.0476 | | .0177 | | | | | |
| 40.000 | | | .6835 | .5557 | .2268 | .1616 | | .1797 | | -.0536 | -.0031 | -.0456 | -.0743 | .0154 | -.0134 |
| 55.000 | | | .5852 | .4332 | .3209 | .2692 | | .1609 | | .1071 | | | | | |
| 70.000 | | | .5257 | .3818 | .2923 | .2152 | | .1761 | | .0956 | -.0618 | -.0775 | -.0936 | -.0766 | |
| 90.000 | | .6114 | .4948 | .3438 | .2624 | .2001 | | .1995 | | .0000 | -.0315 | -.0543 | -.1006 | -.1226 | |
| 120.000 | | | .4530 | .3233 | .2183 | .1899 | | .3005 | | .2168 | .0135 | -.1283 | -.1406 | -.1193 | |
| 140.000 | | | | | | | | | | .2050 | | | | | |
| 150.000 | | | .3648 | .2671 | .2189 | .1886 | | | | .0807 | -.1441 | -.1370 | -.1093 | -.0766 | |
| 151.000 | | | | | | | | | .6098 | | | | | | |
| 156.000 | | | | | | | | .6227 | | | | | | | |
| 162.000 | | | | | | | | | .7833 | | | | | | |
| 165.000 | | | | | | | | | | -.0030 | -.1565 | -.1140 | -.0856 | -.0722 | |
| 169.000 | | | | | | | | .6047 | | | | | | | |
| 174.000 | | | | | | | .5935 | | | | | | | | |
| 190.000 | 1.2407 | .5938 | .3251 | .2533 | .2162 | .1953 | | .8524 | | -.0839 | -.1568 | -.1003 | -.0726 | -.0691 | |
| 305.000 | | | .5476 | .3724 | .2483 | .3244 | | .1784 | | .0723 | | | | | |
| 320.000 | | | .6945 | .4731 | .1471 | .2058 | | .1088 | | -.0594 | .0589 | -.0923 | -.0579 | -.0385 | -.0225 |
| 340.000 | | | .7588 | .4252 | .0335 | .0699 | | -.0245 | | .0468 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1416 | .2589 | .3676 | .3114 | -.1506 | -.1830 | -.1190 | | -.0775 | -.0996 |
| 40.000 | .0352 | .2272 | .3277 | .1310 | -.1608 | -.1608 | -.1816 | | -.1743 | -.1254 |
| 70.000 | -.0654 | -.1024 | -.1183 | -.1053 | .0000 | -.0520 | -.0884 | | | |
| 90.000 | -.0518 | -.0593 | -.0910 | .0041 | -.0003 | -.0477 | -.0932 | | | |
| 105.000 | | | .0000 | .0699 | .0031 | -.0801 | -.1170 | | | |
| 110.000 | | | | | | | | -.1493 | | |
| 120.000 | -.0623 | -.0470 | .0587 | .0719 | .0308 | -.0401 | -.0843 | -.1262 | | |
| 135.000 | | | .0526 | .0787 | .0439 | -.0098 | -.0306 | | | |
| 150.000 | -.0718 | -.0552 | .0498 | .0998 | .0422 | .0330 | .0024 | | | |
| 165.000 | -.0746 | | -.0027 | | .2078 | .0935 | -.0959 | | | |
| 180.000 | -.0780 | -.0638 | -.0521 | .2296 | | | | | | |
| 320.000 | .0621 | .2224 | .5028 | .1867 | -.0784 | -.1500 | -.1816 | | | |

ARC97-019 (A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB42) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 978.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.500 RN/FT = 2.500
ELV-IB = .000 ELV-OB = .000
RUDDER = .000 SPDBRK = .000

ALPHAO( I) = -6.275 BETAO ( I) = .222

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0060 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2240 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.7301 | .8594 | .3315 | .1433 | .1657 | .6999 | | .1420 | | .0474 | .2954 | .0422 | .0466 | -.0592 | -.0419 |
| 20.000 | | | .3720 | .1466 | .1675 | .5753 | | .1366 | | .0756 | | | | | |
| 40.000 | | | .4087 | .1422 | .1473 | .3829 | | .2533 | | .0267 | .1308 | .0595 | .0767 | -.0374 | .0281 |
| 55.000 | | | .5453 | .2883 | .1740 | .1680 | | .3594 | | .2468 | | | | | |
| 70.000 | | | .5545 | .3488 | .2432 | .1467 | | .1802 | | .2027 | .0962 | .0627 | .0548 | .0130 | |
| 90.000 | | .8184 | .5951 | .4051 | .2832 | .1767 | | .1377 | | .0000 | .1124 | .0784 | .0245 | .0209 | |
| 120.000 | | | .6710 | .5186 | .3894 | .3327 | | .3765 | | .2853 | .0797 | -.0953 | -.0192 | .0330 | |
| 140.000 | | | | | | | | | | .2525 | | | | | |
| 150.000 | | | .6784 | .5475 | .4811 | .4194 | | | | .2241 | -.0442 | -.0145 | -.0002 | .0474 | |
| 151.000 | | | | | | | | | .9541 | | | | | | |
| 156.000 | | | | | | | | 1.1150 | | | | | | | |
| 162.000 | | | | | | | | | 1.2635 | | | | | | |
| 165.000 | | | | | | | | | | .1607 | -.0406 | .0066 | .0237 | .0281 | |
| 169.000 | | | | | | | | 1.4370 | | | | | | | |
| 174.000 | | | | | | | 1.1340 | | | | | | | | |
| 180.000 | 1.7301 | 1.0317 | .6560 | .5503 | .5013 | .4519 | | 1.4409 | | .0660 | -.0432 | .0069 | .0334 | .0215 | |
| 305.000 | | | .5424 | .2717 | .1818 | .2128 | | .3404 | | .2327 | | | | | |
| 320.000 | | | .4523 | .1278 | .1800 | .3435 | | .2423 | | .0494 | .2151 | .0473 | .0144 | .0077 | .0522 |
| 340.000 | | | .3889 | .1238 | .1518 | .5064 | | .1345 | | .1207 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0864 | .1426 | .3758 | .3988 | -.0859 | -.1747 | -.1345 | | -.0765 | -.0827 |
| 40.000 | -.0131 | .1262 | .3094 | .0045 | -.1481 | -.1484 | -.1367 | | -.0725 | -.0980 |
| 70.000 | .0099 | -.0052 | -.0159 | .0825 | .0000 | .0511 | .0393 | | | |
| 90.000 | .0153 | .0263 | .0052 | .1234 | .1000 | .0620 | .0238 | | | |
| 105.000 | | | .0000 | .1952 | .0562 | .0186 | -.0143 | | | |
| 110.000 | | | | | | | | -.0606 | | |
| 120.000 | .0266 | .0278 | .1544 | .1702 | .1017 | .0600 | -.0088 | -.0635 | | |
| 135.000 | | | .0552 | .2736 | .1728 | .0615 | .0527 | | | |
| 150.000 | .0478 | .0461 | .0515 | .2915 | .2031 | .1464 | .1435 | | | |
| 165.000 | .0511 | | .0548 | | .3814 | .2619 | -.0613 | | | |
| 180.000 | .0587 | .0555 | .0493 | .3858 | | | | | | |
| 320.000 | .0463 | .1971 | .3929 | .0328 | -.0781 | -.1349 | -.1495 | | | |

ARC97-019 IAB1 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB42)

ALPHA0( 2) = -4.238 BETA0 ( 1) = -3.999

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.6706 | .6233 | .2951 | .1418 | .1960 | .5739 | | .0767 | | .1417 | .1608 | .0876 | .0855 | -.0216 | -.0017 |
| 20.000 | | | .3781 | .1611 | .2111 | .5040 | | .0437 | | .1677 | | | | | |
| 40.000 | | | .5477 | .1848 | .2377 | .4567 | | .3553 | | .0857 | .0771 | .0512 | .0997 | -.0116 | .0558 |
| 55.000 | | | .6402 | .3694 | .2506 | .2804 | | .3963 | | .2879 | | | | | |
| 70.000 | | | .6679 | .4388 | .3251 | .2732 | | .4338 | | .3321 | .1083 | .0926 | .0712 | .0212 | |
| 90.000 | | .9267 | .7092 | .4975 | .3676 | .2501 | | .2890 | | .0000 | .1621 | .1069 | .0487 | .0170 | |
| 120.000 | | | .7508 | .5870 | .4409 | .3695 | | .3742 | | .3442 | .1279 | -.0009 | .0059 | .0120 | |
| 140.000 | | | | | | | | | | .3323 | | | | | |
| 150.000 | | | .7038 | .5425 | .4719 | .3976 | | | | .2549 | -.0423 | -.0187 | .0016 | .0271 | |
| 151.000 | | | | | | | | | .9878 | | | | | | |
| 158.000 | | | | | | | | 1.0149 | | | | | | | |
| 162.000 | | | | | | | | | 1.2432 | | | | | | |
| 165.000 | | | | | | | | | | .1585 | -.0488 | -.0251 | .0041 | .0212 | |
| 169.000 | | | | | | | | 1.2728 | | | | | | | |
| 174.000 | | | | | | | .9802 | | | | | | | | |
| 180.000 | 1.6706 | .9833 | .6068 | .4806 | .4430 | .3951 | | 1.2792 | | .0512 | -.0529 | -.0127 | .0020 | .0103 | |
| 305.000 | | | .4188 | .1632 | .1391 | .1665 | | .1802 | | .1333 | | | | | |
| 320.000 | | | .3694 | .0930 | .1351 | .1669 | | .1075 | | .0753 | .1581 | .0077 | -.0209 | -.0428 | - .243 |
| 340.000 | | | .3327 | .1154 | .1629 | .4481 | | .0804 | | .0779 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0602 | .1530 | .4046 | .2820 | -.0989 | -.1714 | -.1787 | | -.1561 | -.1202 |
| 40.000 | -.0235 | .0893 | .2678 | -.0525 | -.1423 | -.1047 | -.1682 | | -.1667 | -.1721 |
| 70.000 | -.0006 | -.0184 | -.0241 | .0179 | .0000 | .0532 | .0329 | | | |
| 90.000 | .0034 | .0249 | .0043 | .1342 | .1024 | .0587 | .0257 | | | |
| 105.000 | | | .0000 | .1693 | .0860 | .0262 | -.0111 | | | |
| 110.000 | | | | | | | | -.0485 | | |
| 120.000 | .0107 | .0153 | .0425 | .2220 | .2301 | .0890 | .0253 | -.0402 | | |
| 135.000 | | | .1123 | .2494 | .2020 | .0715 | .0484 | | | |
| 150.000 | .0114 | .0120 | .0948 | .2326 | .0725 | .1359 | .1730 | | | |
| 165.000 | .0099 | | .0397 | | .3661 | .2083 | -.0056 | | | |
| 180.000 | .0129 | .0248 | .0215 | .2760 | | | | | | |
| 320.000 | .1082 | .0547 | .3306 | .0878 | -.0205 | -.1263 | -.1562 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB42)

ALPHA0( 2) = -4.215 BETA0 ( 2) = .197

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0480 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.0861 | .3294 | .3085 | .1258 | .1870 | .5450 | | .0928 | | .0421 | .2687 | .0342 | .0374 | -.0895 | -.0644 |
| 20.000 | | | .3468 | .1305 | .1697 | .3841 | | .1091 | | .0814 | | | | | |
| 40.000 | | | .4950 | .1258 | .1733 | .3231 | | .2813 | | 0182 | .1202 | .0389 | .0613 | -.0517 | .0135 |
| 55.000 | | | .5079 | .2650 | .1582 | .1555 | | .3504 | | .2192 | | | | | |
| 70.000 | | | .5211 | .3230 | .2230 | .1562 | | .1761 | | .2588 | .0820 | .0461 | .0385 | -.0068 | |
| 90.000 | | .7780 | .5604 | .3731 | .2618 | .1562 | | .1405 | | .0000 | .1105 | .0649 | .0135 | -.0072 | |
| 120.000 | | | .6228 | .4734 | .3468 | .2953 | | .3329 | | .2594 | .0587 | -.0834 | -.0278 | .0178 | |
| 140.000 | | | | | | | | | | .2252 | | | | | |
| 150.000 | | | .6208 | .4874 | .4240 | .3698 | | | | .1953 | -.0593 | -.0339 | -.0221 | .0302 | |
| 151.000 | | | | | | | | | .8702 | | | | | | |
| 158.000 | | | | | | | | 1.0135 | | | | | | | |
| 162.000 | | | | | | | | | 1.1863 | | | | | | |
| 165.000 | | | | | | | | | | .1328 | -.0582 | -.0178 | -.0011 | .0178 | |
| 169.000 | | | | | | | | 1.3161 | | | | | | | |
| 174.000 | | | | | | | 1.0459 | | | | | | | | |
| 180.000 | 1.6861 | .9487 | .5924 | .4856 | .4405 | .4002 | | 1.3239 | | .0482 | -.0622 | -.0153 | .0096 | .0109 | |
| 305.000 | | | .5179 | .2507 | .1861 | .3032 | | .3062 | | .2173 | | | | | |
| 320.000 | | | .4320 | .1107 | .2384 | .1807 | | .2649 | | .0382 | .2058 | .0260 | .0210 | -.0469 | .0386 |
| 340.000 | | | .3636 | .1240 | .3162 | .2683 | | .0927 | | .1299 | | | | | |

| X/LB | .0520 | .7280 | .7780 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0615 | .1466 | .3418 | .3220 | -.0948 | -.1747 | -.1385 | | -.0791 | -.0795 |
| 40.000 | -.0240 | .1153 | .2807 | .0194 | -.1438 | -.1376 | -.1388 | | -.0711 | -.0950 |
| 70.000 | -.0189 | -.0324 | -.0418 | .0582 | .0006 | .0181 | .0034 | | | |
| 90.000 | -.0105 | -.0004 | -.0175 | .0749 | .0541 | .0418 | .0128 | | | |
| 105.000 | | | .0000 | .1311 | -.0009 | -.0180 | -.0308 | | | |
| 110.000 | | | | | | | | -.0701 | | |
| 120.000 | .0000 | .0052 | .1448 | .1888 | .1617 | .0378 | -.0123 | -.0881 | | |
| 138.000 | | | .1487 | .2618 | .1635 | .0823 | .0483 | | | |
| 190.000 | .0302 | .0234 | .0883 | .2538 | .1181 | .1019 | .1186 | | | |
| 185.000 | .0353 | | .0848 | | .3479 | .2233 | -.0719 | | | |
| 180.000 | .0411 | .0344 | .0240 | .3488 | | | | | | |
| 320.000 | .0287 | .1753 | .3852 | .0485 | -.0771 | -.1260 | -.1631 | | | |

ARC97-018 1A81 LVAP(ALLHL SEALED) RB. FUSELAGE (RETB42)

ALPHA0( 2) = -4.201 BETA0 ( 3) = 3.750

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | 0000 | .0080 | .0230 | .0463 | .0700 | .1120 | .1580 | .1880 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.6376 | .8139 | .3110 | .1227 | .1670 | .5522 | | .0822 | | .1443 | .1984 | -.0557 | -.0202 | -.0503 | -.0520 |
| 20.000 | | | .3196 | .1026 | .1335 | .4083 | | .0534 | | .0242 | | | | | |
| 40.000 | | | .3717 | .0876 | .1353 | .1683 | | .1024 | | -.0170 | .0674 | .0512 | .0383 | -.0532 | -.0233 |
| 55.000 | | | .3911 | .1795 | .1127 | .0956 | | .1702 | | .0903 | | | | | |
| 70.000 | | | .3890 | .2175 | .1281 | .0931 | | .0809 | | .0904 | .0419 | .0017 | .0002 | -.0315 | |
| 90.000 | | .8188 | .4231 | .2616 | .1597 | .0772 | | .0576 | | .0000 | -.0148 | .0247 | -.0203 | -.0183 | |
| 120.000 | | | .5031 | .3725 | .2616 | .2203 | | .2779 | | .1679 | .0042 | -.1318 | -.0578 | .0002 | |
| 140.000 | | | | | | | | | | .1621 | | | | | |
| 150.000 | | | .5421 | .4407 | .3009 | .3231 | | | | .1677 | -.0787 | -.0450 | -.0222 | -.0215 | |
| 151.000 | | | | | | | | | .7201 | | | | | | |
| 158.000 | | | | | | | | .9622 | | | | | | | |
| 162.000 | | | | | | | | | 1.1320 | | | | | | |
| 165.000 | | | | | | | | | | .0627 | -.0640 | -.0265 | -.0018 | -.0110 | |
| 168.000 | | | | | | | | 1.2103 | | | | | | | |
| 174.000 | | | | | | | .9842 | | | | | | | | |
| 180.000 | 1.6376 | .8137 | .5807 | .4777 | .4341 | .3939 | | 1.2925 | | .0473 | -.0629 | -.0126 | .0059 | .0064 | |
| 305.000 | | | .6318 | .3456 | .2649 | .5444 | | .3898 | | .2953 | | | | | |
| 320.000 | | | .4820 | .1874 | .2203 | .3770 | | .3159 | | .1026 | .1848 | .0432 | .0347 | -.0321 | .0533 |
| 340.000 | | | .3672 | .1257 | .1635 | .2994 | | .0228 | | .1675 | | | | | |

| X/LB | .0520 | .7280 | .7780 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0788 | .1255 | .3678 | .3852 | -.1406 | -.1792 | -.1384 | | -.0728 | -.0833 |
| 40.000 | .0544 | .1041 | .2925 | .1328 | -.1319 | -.1512 | -.1545 | | -.0768 | -.0808 |
| 70.000 | -.0146 | -.0335 | -.0441 | .0214 | .0070 | .0009 | -.0011 | | | |
| 90.000 | -.0187 | .0021 | -.0200 | .0949 | .0482 | -.0082 | -.0207 | | | |
| 105.000 | | | .0000 | .1109 | .0333 | -.0358 | -.0559 | | | |
| 110.000 | | | | | | | | -.0882 | | |
| 120.000 | -.0085 | -.0187 | .0414 | .0643 | .0989 | -.0120 | -.0789 | -.1197 | | |
| 135.000 | | | .0340 | .1831 | .1046 | .0265 | -.0091 | | | |
| 150.000 | .0087 | .0080 | .0051 | .2222 | .1723 | .0413 | .0334 | | | |
| 165.000 | .0072 | | .0181 | | .2160 | .1348 | -.1038 | | | |
| 180.000 | -.0088 | .0040 | .0371 | .2375 | | | | | | |
| 320.000 | -.0037 | .1429 | .3667 | -.0682 | -.1177 | -.1310 | -.1458 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB42)

ALPHAO( 3) = .088 BETAO ( 1) = -6.077

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5016 | .7935 | .2593 | .2434 | .4351 | .3331 | | .0338 | | .1214 | .0407 | .1016 | .0585 | -.0388 | -.0[illegible]2 |
| 20.000 | | | .3566 | .2463 | .5593 | .2154 | | .0330 | | .1618 | | | | | |
| 40.000 | | | .5556 | .2452 | .4294 | .4630 | | .3559 | | .1096 | .0232 | .0318 | -.0338 | .0024 | .0488 |
| 55.000 | | | .6547 | .3896 | .3677 | .5713 | | .3627 | | .2747 | | | | | |
| 70.000 | | | .6717 | .4408 | .3452 | .3618 | | .4024 | | .2828 | .0687 | .0622 | .0500 | .0145 | |
| 90.000 | | .8937 | .6877 | .4863 | .3677 | .3388 | | .4415 | | .0000 | .1081 | .0872 | .0386 | .0013 | |
| 120.000 | | | .6802 | .5227 | .3901 | .3374 | | .3801 | | .4201 | .1905 | .0095 | -.0310 | -.0473 | |
| 140.000 | | | | | | | | | | .3631 | | | | | |
| 150.000 | | | .5960 | .4308 | .3697 | .3223 | | | | .2216 | -.0628 | -.0445 | -.0395 | -.0331 | |
| 151.000 | | | | | | | | | .9033 | | | | | | |
| 156.000 | | | | | | | | .9684 | | | | | | | |
| 162.000 | | | | | | | | | 1.0722 | | | | | | |
| 165.000 | | | | | | | | | | .0980 | -.0732 | -.0416 | -.0505 | -.0378 | |
| 169.000 | | | | | | | | 1.1015 | | | | | | | |
| 174.000 | | | | | | | .8537 | | | | | | | | |
| 180.000 | 1.5016 | .8098 | .4744 | .3659 | .3209 | .2932 | | 1.0580 | | .0096 | -.0986 | -.0583 | -.0398 | -.0422 | |
| 305.000 | | | .2754 | .1277 | .1307 | .1067 | | .0852 | | .0282 | | | | | |
| 320.000 | | | .2552 | .1692 | .3575 | .0496 | | .0546 | | .0189 | .1020 | -.0292 | -.0796 | -.0657 | -.0411 |
| 340.000 | | | .2635 | .2284 | .3779 | .2502 | | .0376 | | .0300 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0216 | .1286 | .3836 | .2899 | -.0764 | -.1638 | -.1764 | | -.1413 | -.1105 |
| 40.000 | -.0414 | .0539 | .1650 | -.0910 | -.1214 | -.0960 | -.1041 | | -.1572 | -.1637 |
| 70.000 | -.0099 | -.0360 | -.0416 | -.0300 | .0000 | .0365 | .0157 | | | |
| 90.000 | -.0161 | .0024 | -.0223 | .0071 | .0851 | .0630 | .0201 | | | |
| 105.000 | | | .0000 | .1440 | .1243 | .0256 | -.0085 | | | |
| 110.000 | | | | | | | | -.0563 | | |
| 120.000 | -.0570 | -.0354 | -.0339 | .1537 | .1907 | .0660 | .0132 | -.0429 | | |
| 135.000 | | | .0674 | .1319 | .1707 | .0525 | .0057 | | | |
| 150.000 | -.0447 | -.0445 | .1178 | .0869 | -.0096 | .0070 | -.0263 | | | |
| 165.000 | -.0465 | | .1142 | | .2569 | .2542 | -.0118 | | | |
| 180.000 | -.0498 | -.0376 | .1062 | .0934 | | | | | | |
| 320.000 | .0978 | .0220 | .4047 | .1395 | -.0140 | -.1265 | -.1482 | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET842)

ALPHAO( 3) = -.087 BETAO ( 2) = -4.025

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4807 | .7764 | .2625 | .2803 | .4393 | .3062 | | .0468 | | .0957 | .1528 | .0557 | .0517 | -.0539 | -.0417 |
| 20.000 | | | .3444 | .2552 | .5188 | .2530 | | .0115 | | .1433 | | | | | |
| 40.000 | | | .5091 | .2462 | .5017 | .3421 | | .3127 | | .0829 | .0194 | .0083 | .0424 | -.0308 | .0189 |
| 55.000 | | | .5906 | .3413 | .3295 | .4219 | | .3074 | | .2321 | | | | | |
| 70.000 | | | .6040 | .3966 | .2925 | .2656 | | .3404 | | .2449 | .0571 | .0442 | .0257 | -.0166 | |
| 90.000 | | .8147 | .6200 | .4382 | .3137 | .2620 | | .3063 | | .0000 | .0972 | .0655 | .0165 | -.0276 | |
| 120.000 | | | .6384 | .4913 | .3515 | .2857 | | .3315 | | .3425 | .1550 | -.0183 | -.0429 | -.0475 | |
| 140.000 | | | | | | | | | | .2844 | | | | | |
| 150.000 | | | .5821 | .4245 | .3576 | .2961 | | | | .2052 | -.0767 | -.0475 | -.0482 | -.0228 | |
| 151.000 | | | | | | | | | .8355 | | | | | | |
| 156.000 | | | | | | | | .8472 | | | | | | | |
| 162.000 | | | | | | | | | 1.0769 | | | | | | |
| 165.000 | | | | | | | | | | .0958 | -.0820 | -.0599 | -.0386 | -.0283 | |
| 169.000 | | | | | | | | 1.0595 | | | | | | | |
| 174.000 | | | | | | | .7696 | | | | | | | | |
| 180.000 | 1.4807 | .8179 | .4801 | .3775 | .3281 | .2886 | | 1.0656 | | .0108 | -.0989 | -.0599 | -.0333 | -.0326 | |
| 305.000 | | | .3731 | .1554 | .1765 | .1736 | | .1102 | | .0972 | | | | | |
| 320.000 | | | .3269 | .1866 | .3939 | .0795 | | .0974 | | .0463 | .1302 | -.0159 | -.0535 | -.0961 | -.0439 |
| 340.000 | | | .2954 | .2211 | .4244 | .2426 | | .0506 | | .0202 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0457 | .1175 | .3805 | .2477 | -.0971 | -. [illegible] | -.1724 | | -.1340 | -.0971 |
| 40.000 | -.0080 | .0827 | .2302 | -.0525 | -.1219 | -.1065 | -.1492 | | -.1655 | -.1691 |
| 70.000 | -.0406 | -.0547 | -.0590 | -.0426 | .0000 | .0076 | -.0087 | | | |
| 90.000 | -.0402 | -.0185 | -.0351 | .0591 | .0527 | .0334 | .0011 | | | |
| 105.000 | | | .0000 | .1240 | .0799 | .0010 | -.0362 | | | |
| 110.000 | | | | | | | | -.0800 | | |
| 120.000 | -.0475 | -.0335 | .0811 | .1428 | .1708 | .0511 | -.0098 | -.0612 | | |
| 135.000 | | | .1269 | .1515 | .1552 | .0391 | .0018 | | | |
| 150.000 | -.0362 | -.0263 | .1397 | .1497 | .0305 | .0055 | .0833 | | | |
| 165.000 | -.0297 | | .1156 | | .2417 | .2123 | -.0264 | | | |
| 180.000 | -.0163 | -.0139 | .0611 | .1930 | | | | | | |
| 320.000 | .0871 | .0018 | .3325 | .0970 | -.0317 | -.1137 | -.1499 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB42)

ALPHAO( 3) = -.082 BETAO ( 3) = .174

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5016 | .7525 | .2604 | .4033 | .4359 | .1556 | | .0385 | | .0290 | .2307 | .0308 | -.0023 | -.0997 | -.0958 |
| 20.000 | | | .2953 | .2325 | .4284 | .0783 | | .0880 | | .0379 | | | | | |
| 40.000 | | | .3894 | .2210 | .3570 | .1815 | | .2458 | | .0190 | .0863 | .0290 | .0333 | -.0809 | -.0203 |
| 55.000 | | | .4351 | .2203 | .2160 | .2476 | | .2703 | | .1697 | | | | | |
| 70.000 | | | .4401 | .2612 | .1755 | .1502 | | .2067 | | .1981 | .0261 | .0100 | -.0048 | -.0449 | |
| 90.000 | | .6728 | .4700 | .3050 | .2020 | .1401 | | .1534 | | .0000 | .0691 | .0276 | -.0197 | -.0506 | |
| 120.000 | | | .5193 | .3803 | .2634 | .2206 | | .2447 | | .2028 | .0282 | -.0617 | -.0464 | -.0389 | |
| 140.000 | | | | | | | | | | .1827 | | | | | |
| 150.000 | | | .5069 | .3778 | .3194 | .2670 | | | | .1404 | -.0939 | -.0741 | -.0524 | -.0069 | |
| 151.000 | | | | | | | | | .7140 | | | | | | |
| 156.000 | | | | | | | | .8086 | | | | | | | |
| 162.000 | | | | | | | | | 1.0331 | | | | | | |
| 165.000 | | | | | | | | | | .0666 | -.0922 | -.0656 | -.0449 | -.0091 | |
| 169.000 | | | | | | | | 1.1132 | | | | | | | |
| 174.000 | | | | | | | .8700 | | | | | | | | |
| 180.000 | 1.5016 | .8110 | .4764 | .3717 | .3281 | .2914 | | 1.1121 | | .0064 | -.0965 | -.0606 | -.0357 | -.0040 | |
| 305.000 | | | .4653 | .2978 | .3543 | .1822 | | .2383 | | .1752 | | | | | |
| 320.000 | | | .3825 | .3907 | .4531 | .0536 | | .2298 | | .0426 | .1422 | -.0200 | .0070 | -.0947 | -.0015 |
| 340.000 | | | .3136 | .3950 | .4553 | .0557 | | .0755 | | .1254 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0994 | .1498 | .2787 | .2281 | -.1058 | -.1680 | -.1205 | | -.0830 | -.0899 |
| 40.000 | -.0276 | .0983 | .2660 | .0671 | -.1425 | -.1327 | -.1383 | | -.1054 | -.0924 |
| 70.000 | -.0667 | -.0729 | -.0773 | .0100 | .0000 | -.0218 | -.0397 | | | |
| 90.000 | -.0573 | -.0482 | -.0457 | .0511 | .0011 | -.0145 | -.0270 | | | |
| 105.000 | | | .0000 | .0547 | -.0174 | -.0433 | -.0658 | | | |
| 110.000 | | | | | | | | -.0973 | | |
| 120.000 | -.0366 | -.0351 | .0580 | .0957 | .1346 | .0314 | -.0397 | -.0919 | | |
| 135.000 | | | .0667 | .1684 | .1339 | .0176 | .0089 | | | |
| 150.000 | -.0102 | -.0158 | -.0177 | .1950 | .0739 | .0517 | .0584 | | | |
| 165.000 | -.0044 | | -.0147 | | .2692 | .1528 | -.0864 | | | |
| 180.000 | .0000 | -.0060 | -.0137 | .2324 | | | | | | |
| 320.000 | .0093 | .1522 | .3009 | .0710 | -.0818 | -.1216 | -.1640 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB42)

ALPHAO( 3) = -.071 BETAO ( 4) = 3.720

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5566 | .7594 | .2501 | .1710 | .5272 | .4144 | | .0300 | | .0962 | .1474 | -.0512 | -.0387 | -.1102 | -.0825 |
| 20.000 | | | .2501 | .1444 | .4432 | .3325 | | .0352 | | -.0172 | | | | | |
| 40.000 | | | .2996 | .1448 | .2917 | .1093 | | .0810 | | -.0031 | .0610 | .0273 | -.0026 | -.0828 | -.0441 |
| 55.000 | | | .3183 | .1233 | .1251 | .1531 | | .1278 | | .1058 | | | | | |
| 70.000 | | | .3161 | .1589 | .0918 | .0770 | | .0906 | | .0906 | -.0014 | -.0311 | -.0253 | -.0672 | |
| 90.000 | | .5303 | .3416 | .2021 | .1118 | .0791 | | .0743 | | .0000 | -.0103 | -.0040 | -.0487 | -.0594 | |
| 120.000 | | | .4055 | .2863 | .1890 | .1509 | | .1995 | | .1234 | -.0275 | -.1411 | -.0899 | -.0278 | |
| 140.000 | | | | | | | | | | .0986 | | | | | |
| 150.000 | | | .4223 | .3254 | .2748 | .2270 | | | | .0936 | -.1082 | -.0828 | -.0597 | -.0198 | |
| 151.000 | | | | | | | | | .5936 | | | | | | |
| 156.000 | | | | | | | | .8236 | | | | | | | |
| 162.000 | | | | | | | | | .9432 | | | | | | |
| 165.000 | | | | | | | | | | .0101 | -.1000 | -.0668 | -.0374 | -.0437 | |
| 169.000 | | | | | | | | 1.0097 | | | | | | | |
| 174.000 | | | | | | | .8139 | | | | | | | | |
| 180.000 | 1.5566 | .7499 | .4467 | .3558 | .3193 | .2837 | | 1.0638 | | .0065 | -.0992 | -.0573 | -.0345 | -.0394 | |
| 305.000 | | | .5770 | .3117 | .3071 | .4488 | | .2998 | | .2510 | | | | | |
| 320.000 | | | .4421 | .1755 | .2837 | .2873 | | .2892 | | .0918 | .1047 | -.0022 | .0091 | -.0557 | .0219 |
| 340.000 | | | .3307 | .1831 | .5829 | .1893 | | .0111 | | .1481 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0919 | .1125 | .3307 | .3423 | -.1427 | -.1667 | -.1167 | | -.0692 | -.0822 |
| 40.000 | .0505 | .1059 | .2816 | .1514 | -.1217 | -.1159 | -.1359 | | -.0717 | -.0778 |
| 70.000 | -.0636 | -.0709 | -.0773 | -.0191 | .0000 | -.0200 | -.0439 | | | |
| 90.000 | -.0629 | -.0455 | -.0628 | .0234 | -.0197 | -.0284 | -.0399 | | | |
| 105.000 | | | .0000 | .0552 | -.0553 | -.0545 | -.0754 | | | |
| 110.000 | | | | | | | | -.1085 | | |
| 120.000 | -.0401 | -.0518 | -.0352 | .0399 | .0546 | -.0345 | -.0993 | -.1243 | | |
| 135.000 | | | -.0275 | .1310 | .0671 | -.0171 | -.0399 | | | |
| 150.000 | -.0212 | -.0282 | .0351 | .1351 | .1012 | -.0012 | -.0146 | | | |
| 165.000 | -.0216 | | .0736 | | .1321 | .0618 | -.1102 | | | |
| 180.000 | -.0314 | -.0268 | .0973 | .1615 | | | | | | |
| 320.000 | .0324 | .1114 | .3209 | -.0621 | -.1231 | -.1413 | -.0993 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB42)

ALPHAO( 3) = -.067 BETAO ( 5) = 8.427

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5298 | .7870 | .2551 | .2011 | .5495 | .8409 | | .0440 | | .1035 | .1299 | -.0766 | -.0833 | -.0258 | -.0865 |
| 20.000 | | | .2329 | .1832 | .3947 | .1842 | | .0194 | | .0010 | | | | | |
| 40.000 | | | .2523 | .1489 | .3868 | .0473 | | .0591 | | -.0395 | .0468 | .0071 | -.0280 | -.0989 | -.0543 |
| 55.000 | | | .2673 | .1278 | .1121 | .0817 | | .0879 | | .0173 | | | | | |
| 70.000 | | | .2898 | .1210 | .1008 | .0451 | | .0606 | | .0503 | -.0537 | -.0401 | -.0383 | -.0766 | |
| 90.000 | | .4986 | .2960 | .1614 | .0770 | .0605 | | .0517 | | .0000 | -.0469 | -.0386 | -.0539 | -.0588 | |
| 120.000 | | | .3569 | .2455 | .1552 | .1168 | | .1546 | | .0898 | -.0465 | -.1514 | -.0801 | -.0266 | |
| 140.000 | | | | | | | | | | .0669 | | | | | |
| 150.000 | | | .3827 | .3083 | .2538 | .2051 | | | | .0637 | -.1108 | -.0881 | -.0578 | -.0557 | |
| 151.000 | | | | | | | | | .5381 | | | | | | |
| 158.000 | | | | | | | | .7901 | | | | | | | |
| 162.000 | | | | | | | | | .8431 | | | | | | |
| 165.000 | | | | | | | | | | -.0143 | -.1052 | -.0656 | -.0478 | -.0554 | |
| 169.000 | | | | | | | | 1.0100 | | | | | | | |
| 174.000 | | | | | | | .7798 | | | | | | | | |
| 180.000 | 1.5298 | .7421 | .4472 | .3517 | .3112 | .2793 | | 1.0280 | | .0089 | -.0930 | -.0649 | -.0475 | -.0485 | |
| 305.000 | | | .6598 | .3825 | .4094 | .5456 | | .3377 | | .2494 | | | | | |
| 320.000 | | | .4919 | .2387 | .7808 | .3557 | | .2515 | | .1506 | .0562 | .0174 | .0231 | -.0127 | .0529 |
| 340.000 | | | .3499 | .2219 | .6994 | .1588 | | .0329 | | .1023 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9800 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.1159 | .0330 | .3422 | .2630 | -.1448 | -.1569 | -.1049 | | -.0563 | -.0714 |
| 40.000 | .0808 | .1572 | .3092 | .2144 | -.1091 | -.1341 | -.1178 | | -.0660 | -.0721 |
| 70.000 | -.0492 | -.0637 | -.0724 | -.0223 | .0000 | -.0304 | -.0507 | | | |
| 90.000 | -.0557 | -.0391 | -.0568 | .0434 | -.0288 | -.0529 | -.0565 | | | |
| 105.000 | | | .0000 | .0398 | -.0840 | -.0958 | -.0955 | | | |
| 110.000 | | | | | | | | -.1188 | | |
| 120.000 | -.0554 | -.0623 | .0557 | .0229 | .0378 | -.0413 | -.1063 | -.1414 | | |
| 135.000 | | | .0590 | .0831 | .0450 | -.0261 | -.0539 | | | |
| 150.000 | -.0413 | -.0418 | .0655 | .1067 | .1063 | -.0207 | -.0467 | | | |
| 165.000 | -.0503 | | .0801 | | .0853 | .0346 | -.1201 | | | |
| 180.000 | -.0870 | -.0630 | .0844 | .0744 | | | | | | |
| 320.000 | .0370 | .0703 | .2405 | -.0532 | -.1236 | -.1454 | -.0785 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET842)

ALPHAO( 4) = 3.400 BETAO ( 1) = -4.002

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3591 | .7289 | .3847 | .5073 | .2768 | .1936 | | .0453 | | .0547 | .1456 | .0369 | .0235 | -.0627 | -.0176 |
| 20.000 | | | .3772 | .5385 | .3938 | .1277 | | .0146 | | .1174 | | | | | |
| 40.000 | | | .4783 | .4626 | .5495 | .3268 | | .2525 | | .0813 | -.0053 | -.0114 | -.0332 | .0065 | .0049 |
| 55.000 | | | .5476 | .4006 | .4680 | .4246 | | .2486 | | .1852 | | | | | |
| 70.000 | | | .5497 | .3616 | .3308 | .3813 | | .2773 | | .1862 | .0143 | .0068 | -.0169 | -.0439 | |
| 90.000 | | .7441 | .5568 | .3853 | .2732 | .2645 | | .3209 | | .0000 | .0422 | .0221 | -.0137 | -.0570 | |
| 120.000 | | | .5458 | .4060 | .2774 | .2287 | | .3056 | | .3270 | .1184 | -.0364 | -.0793 | -.1034 | |
| 140.000 | | | | | | | | | | .3005 | | | | | |
| 150.000 | | | .4722 | .3219 | .2631 | .2068 | | | | .1589 | -.0916 | -.0868 | -.0818 | -.0570 | |
| 151.000 | | | | | | | | | .7407 | | | | | | |
| 156.000 | | | | | | | | .7909 | | | | | | | |
| 162.000 | | | | | | | | | .9108 | | | | | | |
| 165.000 | | | | | | | | | | .0533 | -.0994 | -.0807 | -.0765 | -.0621 | |
| 169.000 | | | | | | | | .8935 | | | | | | | |
| 174.000 | | | | | | | .6458 | | | | | | | | |
| 180.000 | 1.3591 | .6872 | .3750 | .2718 | .2312 | .1979 | | .8821 | | -.0204 | -.1195 | -.0807 | -.0609 | -.0574 | |
| 305.000 | | | .3378 | .2653 | .2595 | .0822 | | .1061 | | .0816 | | | | | |
| 320.000 | | | .3688 | .3502 | .3823 | -.0163 | | .1220 | | .0605 | .1249 | -.0378 | -.0715 | -.1109 | -.0291 |
| 340.000 | | | .3856 | .4307 | .3196 | .0900 | | .0511 | | .0018 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0533 | .1315 | .4001 | .2601 | -.0842 | -.1693 | -.1621 | | -.0996 | -.0557 |
| 40.000 | .0316 | .1069 | .2315 | .0125 | -.0860 | -.0820 | -.1285 | | -.1425 | -.1523 |
| 70.000 | -.0328 | -.0624 | -.0745 | -.0651 | .0000 | -.0143 | -.0299 | | | |
| 90.000 | -.0380 | -.0348 | -.0564 | -.0136 | .0346 | .0151 | -.0194 | | | |
| 105.000 | | | .0000 | .0796 | .0683 | -.0049 | -.0480 | | | |
| 110.000 | | | | | | | | -.0891 | | |
| 120.000 | -.0867 | -.0651 | .0531 | .0806 | .1183 | .0149 | -.0267 | -.0750 | | |
| 135.000 | | | .0658 | .0821 | .1092 | -.0014 | -.0368 | | | |
| 150.000 | -.0628 | -.0408 | .0785 | .0788 | -.0270 | -.0039 | .0019 | | | |
| 165.000 | -.0595 | | .0770 | | .1444 | .1449 | -.0415 | | | |
| 180.000 | -.0438 | -.0419 | .0734 | .1194 | | | | | | |
| 320.000 | .0765 | .0067 | .3468 | .1129 | -.0273 | -.0949 | -.1436 | | | |

ARC97-019 !A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET842)

ALPHAO( 4) = 3.413 BETAO ( 2) = .178

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3179 | .7120 | .3840 | .4497 | .2986 | .1173 | | .0179 | | -.0022 | .2014 | .0049 | -.0045 | -.1121 | -.1012 |
| 20.000 | | | .5391 | .4808 | .2592 | .0642 | | .0659 | | .0574 | | | | | |
| 40.000 | | | .4033 | .4733 | .3988 | .0578 | | .2059 | | .0000 | .0357 | .0110 | -.0173 | -.0691 | -.0219 |
| 55.000 | | | .4227 | .3942 | .3440 | .1320 | | .2070 | | .1357 | | | | | |
| 70.000 | | | .3929 | .2939 | .2728 | .1697 | | .2010 | | .1396 | -.0097 | -.0255 | -.0421 | -.0752 | |
| 90.000 | | .5819 | .3976 | .2699 | .2151 | .1704 | | .1567 | | .0000 | .0182 | -.0063 | -.0453 | -.0840 | |
| 120.000 | | | .4191 | .3021 | .1973 | .1726 | | .2176 | | .1756 | .0375 | -.0741 | -.0944 | -.0865 | |
| 140.000 | | | | | | | | | | .1524 | | | | | |
| 150.000 | | | .3954 | .2828 | .2307 | .1844 | | | | .1008 | -.1146 | -.0968 | -.0759 | -.0327 | |
| 151.000 | | | | | | | | | .5943 | | | | | | |
| 156.000 | | | | | | | | .6445 | | | | | | | |
| 162.000 | | | | | | | | | .8780 | | | | | | |
| 165.000 | | | | | | | | | | .0221 | -.1167 | -.0950 | -.0606 | -.0313 | |
| 169.000 | | | | | | | | .9066 | | | | | | | |
| 174.000 | | | | | | | .6740 | | | | | | | | |
| 180.000 | 1.3179 | .6596 | .3642 | .2756 | .2368 | .2024 | | .9215 | | -.0265 | -.1221 | -.0933 | -.0531 | -.0266 | |
| 305.000 | | | .4220 | .3326 | .2730 | .3021 | | .2024 | | .1352 | | | | | |
| 320.000 | | | .3652 | .3337 | .4115 | .2250 | | .2031 | | .0436 | .0507 | -.0269 | -.0159 | -.0741 | -.0150 |
| 330.000 | | | .3594 | .5069 | .4105 | .0922 | | .0567 | | .0787 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0303 | .1772 | .3011 | .2462 | -.0908 | -.1601 | -.1053 | | -.0786 | -.0818 |
| 40.000 | -.0037 | .1293 | .3062 | .0948 | -.1286 | -.1235 | -.1393 | | -.1529 | -.1107 |
| 70.000 | -.0759 | -.0842 | -.0927 | -.0120 | .0000 | -.0484 | -.0648 | | | |
| 90.000 | -.0730 | -.0498 | -.0396 | .0163 | -.0259 | -.0430 | -.0550 | | | |
| 105.000 | | | .0000 | .0446 | -.0281 | -.0553 | -.0796 | | | |
| 110.000 | | | | | | | | -.1082 | | |
| 120.000 | -.0712 | -.0433 | .0526 | .0379 | .0974 | .0126 | -.0550 | -.0980 | | |
| 135.000 | | | .0279 | .1145 | .0851 | -.0005 | -.0189 | | | |
| 150.000 | -.0483 | -.0513 | -.0494 | .1381 | .0499 | .0162 | .0353 | | | |
| 165.000 | -.0440 | | -.0476 | | .2193 | .1152 | -.0337 | | | |
| 180.000 | -.0384 | -.0404 | -.0478 | .1831 | | | | | | |
| 320.000 | .0481 | .1812 | .3494 | .1170 | -.0767 | -.0894 | -.1302 | | | |

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET842)

ALPHAO( 4) = 3.420 BETAO ( 3) = 3.721

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3491 | .6741 | .3572 | .5439 | .2748 | .0544 | | .0559 | | .0399 | .1053 | -.0669 | -.0544 | -.0647 | -.0696 |
| 20.000 | | | .3529 | .5023 | .2102 | .0472 | | .0261 | | -.0380 | | | | | |
| 40.000 | | | .2727 | .4180 | .2640 | -.0067 | | .1171 | | -.0237 | .0723 | .0041 | -.0608 | -.1113 | -.0083 |
| 55.000 | | | .2587 | .2547 | .2338 | .0433 | | .0965 | | .0776 | | | | | |
| 70.000 | | | .2440 | .1764 | .1725 | .0976 | | .0310 | | .1008 | -.0307 | -.0540 | -.0555 | -.0971 | |
| 90.000 | | .4456 | .2616 | .1488 | .1204 | .0886 | | .0616 | | .0000 | .0027 | -.0348 | -.0669 | -.0953 | |
| 120.000 | | | .3098 | .2091 | .1267 | .0994 | | .1383 | | .1089 | -.0328 | -.1288 | -.0950 | -.0544 | |
| 140.000 | | | | | | | | | | .0615 | | | | | |
| 150.000 | | | .3212 | .2389 | .1917 | .1501 | | | | .0439 | -.1289 | -.1049 | -.0782 | -.0329 | |
| 151.000 | | | | | | | | | .4657 | | | | | | |
| 156.000 | | | | | | | | .6205 | | | | | | | |
| 162.000 | | | | | | | | | .8065 | | | | | | |
| 165.000 | | | | | | | | | | -.0346 | -.1264 | -.0921 | -.0647 | -.0572 | |
| 169.000 | | | | | | | | .8423 | | | | | | | |
| 174.000 | | | | | | | .6193 | | | | | | | | |
| 180.000 | 1.3491 | .6274 | .3507 | .2636 | .2263 | .1946 | | .8789 | | -.0307 | -.1203 | -.0851 | -.0736 | -.0707 | |
| 305.000 | | | .5364 | .4510 | .5372 | .4232 | | .2551 | | .1749 | | | | | |
| 320.000 | | | .4061 | .5915 | .6058 | .2130 | | .2078 | | .1031 | .0358 | -.0178 | -.0348 | .0153 | -.0072 |
| 340.000 | | | .3706 | .5589 | .4610 | .0674 | | -.0020 | | .0913 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0739 | .1532 | .2721 | .3584 | -.1393 | -.1459 | -.1002 | | -.0717 | -.0933 |
| 40.000 | .0527 | .1271 | .3872 | .1647 | -.1233 | -.0982 | -.1437 | | -.0808 | -.0844 |
| 70.000 | -.0834 | -.0892 | -.0950 | -.0399 | .0002 | -.0498 | -.0690 | | | |
| 90.000 | -.0917 | -.0665 | -.0837 | -.0112 | -.0335 | -.0397 | -.0520 | | | |
| 105.000 | | | .0000 | .0405 | -.0695 | -.0815 | -.0915 | | | |
| 110.000 | | | | | | | | -.1209 | | |
| 120.000 | -.0725 | -.0786 | -.0422 | .0215 | .0305 | -.0288 | -.0839 | -.1209 | | |
| 135.000 | | | -.0574 | .0804 | .0429 | -.0455 | -.0553 | | | |
| 150.000 | -.0511 | -.0582 | .0431 | .0599 | .0324 | -.0255 | -.0447 | | | |
| 165.000 | -.0522 | | .0627 | | .0626 | .0095 | -.1187 | | | |
| 180.000 | -.0565 | -.0564 | .0635 | .0789 | | | | | | |
| 320.000 | .0730 | .1822 | .2990 | -.0196 | -.1062 | -.1317 | -.1093 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB42)

ALPHAO( 5) = 6.075 BETAO ( 1) = .198

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2918 | .7667 | .6005 | .4482 | .1190 | .0336 | | .0113 | | -.0175 | .2120 | -.0123 | -.0075 | -.1146 | -.0521 |
| 20.000 | | | .6132 | .4851 | .1462 | .0364 | | .0444 | | .0255 | | | | | |
| 40.000 | | | .5952 | .4830 | .2983 | .0551 | | .2083 | | -.0217 | -.0353 | .0042 | -.0352 | -.0153 | -.0173 |
| 55.000 | | | .5243 | .3872 | .3234 | .1238 | | .1738 | | .1223 | | | | | |
| 70.000 | | | .4545 | .3216 | .2689 | .1486 | | .1795 | | .1105 | -.0234 | -.0449 | -.0651 | -.0879 | |
| 90.000 | | .5622 | .4071 | .2986 | .2233 | .1579 | | .1514 | | .0000 | -.0083 | -.0189 | -.0616 | - 0986 | |
| 120.000 | | | .3894 | .2854 | .1899 | .1601 | | .2143 | | .1729 | .0401 | -.0836 | -.1000 | -.1068 | |
| 140.000 | | | | | | | | | | .1320 | | | | | |
| 150.000 | | | .3492 | .2423 | .1950 | .1633 | | | | .0817 | -.1243 | -.1053 | -.0904 | -.0463 | |
| 151.000 | | | | | | | | | .5463 | | | | | | |
| 156.000 | | | | | | | | .5733 | | | | | | | |
| 162.000 | | | | | | | | | .7974 | | | | | | |
| 165.000 | | | | | | | | | | .0049 | -.1286 | -.1057 | - 0687 | -.0452 | |
| 169.000 | | | | | | | | .7978 | | | | | | | |
| 174.000 | | | | | | | .5837 | | | | | | | | |
| 180.000 | 1.2918 | .5899 | .3172 | .2323 | .1942 | .1730 | | .8276 | | -.0403 | -.1329 | -.1046 | -.0602 | -.0409 | |
| 305.000 | | | .4710 | .2864 | .3158 | .2495 | | .1724 | | .1162 | | | | | |
| 320.000 | | | .5346 | .3445 | .3679 | .1690 | | .1820 | | .0333 | -.0015 | -.0559 | -.0374 | -.0561 | -.0166 |
| 340.000 | | | .5989 | .3879 | .2036 | .0817 | | -.0125 | | .0541 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0407 | .2084 | .3502 | .2884 | -.0819 | -.1644 | -.1108 | | -.0700 | -.0761 |
| 40.000 | .0244 | .1663 | .3477 | .1000 | -.1168 | -.1186 | -.1369 | | -.1510 | -.1174 |
| 70.000 | -.0779 | -.0881 | -.0987 | .0307 | .0000 | -.0512 | -.0742 | | | |
| 90.000 | -.0721 | -.0565 | -.0674 | .0199 | -.0143 | -.0415 | -.0662 | | | |
| 105.000 | | | .0000 | .0541 | -.0037 | -.0477 | -.0811 | | | |
| 110.000 | | | | | | | | -.1144 | | |
| 120.000 | -.0775 | -.0441 | .0443 | .0537 | .0741 | -.0003 | -.0600 | -.1010 | | |
| 135.000 | | | .0367 | .0621 | .0428 | -.0051 | -.0321 | | | |
| 150.000 | -.0663 | -.0667 | -.0474 | .1442 | .3068 | .0088 | .0262 | | | |
| 165.000 | -.0609 | | -.0587 | | .2195 | .1045 | -.0988 | | | |
| 180.000 | -.0532 | -.0587 | -.0627 | .1845 | | | | | | |
| 320.000 | .0727 | .2185 | .3895 | .1577 | -.0644 | -.1079 | -.1260 | | | |

ARC97-019 IA8! LVAP(ALLML SEALED) ORB. FUSELAGE (RET843) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.550 RN/FT = 2.500
ELV-IB = 8.000 ELV-OB = .000
RUDDER = .000 SPDBRK = .000

ALPHAO( I) = -6.289 BETAO ( I) = .408

SECTION ( I)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4826 | 1.0478 | .5841 | .2873 | .3026 | 1.0775 | | -.0860 | | -.2594 | .0365 | -.0089 | .0752 | .0117 | -.1637 |
| 20.000 | | | .5967 | .3282 | .3019 | .7633 | | -.1086 | | -.2039 | | | | | |
| 40.000 | | | .6756 | .3807 | .3094 | .5359 | | -.0697 | | -.1790 | -.0203 | .0029 | .1043 | -.1277 | -.0332 |
| 55.000 | | | .7176 | .4631 | .3849 | .4086 | | .1777 | | .0532 | | | | | |
| 70.000 | | | .7170 | .4803 | .3891 | .3548 | | .2845 | | .1483 | -.1825 | -.1851 | -.0871 | .0101 | |
| 90.000 | | .8503 | .7380 | .5137 | .3927 | .3444 | | .3531 | | .0000 | -.1518 | -.1905 | -.1643 | .0117 | |
| 120.000 | | | .7584 | .5827 | .4588 | .4468 | | .5973 | | .1710 | -.0857 | -.3033 | -.1393 | -.0207 | |
| 140.000 | | | | | | | | | | .0499 | | | | | |
| 150.000 | | | .7503 | .6161 | .5252 | .5262 | | | | -.0628 | -.2047 | -.1027 | -.0674 | -.0693 | |
| 151.000 | | | | | | | | | .7523 | | | | | | |
| 156.000 | | | | | | | | 1.0178 | | | | | | | |
| 162.000 | | | | | | | | | .8231 | | | | | | |
| 165.000 | | | | | | | | | | -.0543 | -.1835 | -.0638 | -.0457 | -.0517 | |
| 169.000 | | | | | | | | 1.1139 | | | | | | | |
| 174.000 | | | | | | | 1.1890 | | | | | | | | |
| 180.000 | 1.4826 | .9611 | .7238 | .6255 | .5605 | .5547 | | 1.1055 | | -.1903 | -.1972 | -.0149 | -.0382 | -.0471 | |
| 305.000 | | | .7225 | .4521 | .4050 | .4128 | | .1101 | | .0483 | | | | | |
| 320.000 | | | .6667 | .3379 | .3078 | .5463 | | -.1083 | | -.1580 | .0328 | -.0628 | .0091 | .0344 | -.0778 |
| 340.000 | | | .6379 | .2808 | .3017 | .7795 | | -.1858 | | -.1125 | | | | | |

| X/LB | .0520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0821 | .2016 | .3678 | .2794 | -.1724 | -.1893 | -.1787 | | -.1430 | -.1361 |
| 40.000 | -.0143 | .1360 | .2453 | -.0480 | -.1956 | -.2201 | -.2345 | | -.1410 | -.1463 |
| 70.000 | .0367 | -.0557 | .0031 | .1595 | .0000 | .0330 | -.0799 | | | |
| 90.000 | .0436 | -.0123 | .1370 | .1708 | .0425 | .0347 | -.0056 | | | |
| 105.000 | | | .2221 | .1310 | -.0528 | -.0525 | -.0498 | | | |
| 110.000 | | | | | | | | -.1387 | | |
| 120.000 | .0135 | .0373 | .2738 | .1519 | .0555 | -.0875 | -.1651 | -.1741 | | |
| 135.000 | | | .3403 | .3763 | .1244 | .0599 | .0245 | | | |
| 150.000 | .0042 | .0300 | .3443 | .4037 | .2051 | .1530 | .0775 | | | |
| 165.000 | .0118 | | .3383 | | .4399 | .2357 | -.134- | | | |
| 180.000 | .0102 | .0260 | .3361 | .5053 | | | | | | |
| 320.000 | .0069 | .1910 | .3699 | .0996 | -.2254 | - 1526 | -.1953 | | | |

ARC97-019 IABI LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB43)

ALPHAO( 2) = -4.227 BETAO ( 1) = -3.808

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4301 | 1.0289 | .5707 | .2811 | .2698 | 1.0929 | | -.0478 | | -.1890 | .0737 | -.0382 | .0517 | -.1312 | -.0610 |
| 20.000 | | | .6328 | .3615 | .2534 | .8004 | | -.2138 | | -.0988 | | | | | |
| 40.000 | | | .7917 | .4738 | .3366 | .5689 | | -.0052 | | -.2335 | -.0474 | -.0480 | .0810 | -.0908 | .0078 |
| 55.000 | | | .8577 | .6099 | .4689 | .4004 | | .2141 | | .0900 | | | | | |
| 70.000 | | | .8526 | .6277 | .4773 | .3632 | | .2785 | | .1889 | -.1357 | -.1259 | -.0656 | .0026 | |
| 90.000 | | .9932 | .8410 | .6332 | .4767 | .3807 | | .3648 | | .0000 | -.0995 | -.1396 | -.1299 | .0136 | |
| 120.000 | | | .8091 | .6393 | .5056 | .4688 | | .6443 | | .2498 | -.0389 | -.2507 | -.1383 | .0090 | |
| 140.000 | | | | | | | | | | .2167 | | | | | |
| 150.000 | | | .7354 | .5822 | .5034 | .4811 | | | | .0108 | -.2380 | -.1570 | -.0840 | -.0481 | |
| 151.000 | | | | | | | | | .8009 | | | | | | |
| 156.000 | | | | | | | | 1.0419 | | | | | | | |
| 162.000 | | | | | | | | | .8482 | | | | | | |
| 165.000 | | | | | | | | | | -.0780 | -.2005 | -.1218 | -.0792 | -.0712 | |
| 169.000 | | | | | | | | 1.0898 | | | | | | | |
| 174.000 | | | | | | | 1.1529 | | | | | | | | |
| 180.000 | 1.4301 | .8892 | .6350 | .5457 | .4882 | .4669 | | 1.0190 | | -.1764 | -.2272 | -.1002 | -.0798 | -.0868 | |
| 305.000 | | | .5205 | .2798 | .2867 | .3500 | | .0155 | | -.0689 | | | | | |
| 320.000 | | | .5490 | .2369 | .2887 | .4624 | | -.2122 | | -.2207 | -.0428 | -.1053 | -.0488 | .0543 | .0046 |
| 340.000 | | | .5857 | .2301 | .2606 | .6964 | | -.0950 | | -.2885 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0353 | .2068 | .5493 | .2727 | -.1135 | -.1892 | -.1440 | | -.1017 | -.0984 |
| 40.000 | .0756 | .1166 | .3017 | -.0623 | -.2252 | -.2305 | -.2904 | | -.0900 | -.0938 |
| 70.000 | .0332 | -.0645 | -.0742 | .0728 | .0000 | .0296 | -.0690 | | | |
| 90.000 | .0491 | -.0264 | -.0349 | .1394 | .0484 | .0200 | -.0121 | | | |
| 105.000 | | | .0285 | .1859 | -.0253 | -.0825 | -.0513 | | | |
| 110.000 | | | | | | | | -.1371 | | |
| 120.000 | .0076 | .0094 | .2456 | .2365 | .0903 | -.0496 | -.0861 | -.1161 | | |
| 135.000 | | | .3093 | .3259 | .1038 | .0366 | .0618 | | | |
| 150.000 | -.0297 | -.0048 | .3017 | .3216 | .1038 | .2069 | .1218 | | | |
| 165.000 | -.0438 | | .2852 | | .4603 | .3144 | -.1078 | | | |
| 180.000 | -.0504 | -.0164 | .2674 | .3259 | | | | | | |
| 320.000 | -.0698 | .2417 | .4528 | .3180 | -.1532 | -.1036 | -.1397 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB43)

ALPHAO( 2) = -4.204 BETAO ( 2) = .384

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4331 | 1.1523 | .5770 | .2123 | .1755 | .0441 | | -.1708 | | -.1758 | .0286 | -.0739 | .0837 | .0139 | -.1433 |
| 20.000 | | | .5983 | .2475 | .1735 | .6772 | | -.2401 | | -.1406 | | | | | |
| 40.000 | | | .6837 | .3273 | .1987 | .4872 | | -.0821 | | -.2796 | -.0328 | -.0191 | .0937 | -.1265 | -.0307 |
| 55.000 | | | .7124 | .4220 | .3244 | .2982 | | .1388 | | .0369 | | | | | |
| 70.000 | | | .6954 | .4459 | .3419 | .2482 | | .2397 | | .1233 | -.1907 | -.1901 | -.1252 | -.0298 | |
| 90.000 | | .0824 | .7002 | .4801 | .3509 | .2760 | | .3358 | | .0000 | -.1675 | -.2029 | -.1961 | -.0194 | |
| 120.000 | | | .7063 | .5380 | .4175 | .3839 | | .5667 | | .1593 | -.1075 | -.3149 | -.1634 | -.0424 | |
| 140.000 | | | | | | | | | | .0354 | | | | | |
| 150.000 | | | .6873 | .5567 | .4750 | .4423 | | | | -.0827 | -.2335 | -.1382 | -.0997 | -.0941 | |
| 151.000 | | | | | | | | | .7182 | | | | | | |
| 156.000 | | | | | | | | .9817 | | | | | | | |
| 162.000 | | | | | | | | | .7847 | | | | | | |
| 165.000 | | | | | | | | | | -.0804 | -.2198 | -.1042 | -.0787 | -.0803 | |
| 169.000 | | | | | | | | 1.0736 | | | | | | | |
| 174.000 | | | | | | | 1.1331 | | | | | | | | |
| 180.000 | 1.4331 | .8782 | .8941 | .5648 | .5060 | .4685 | | 1.0652 | | -.2194 | -.2273 | -.0524 | -.0715 | -.0766 | |
| 305.000 | | | .7024 | .4136 | .3658 | .3677 | | .0846 | | .0208 | | | | | |
| 320.000 | | | .6704 | .2873 | .2330 | .5183 | | -.1141 | | -.2619 | .0106 | -.1055 | .0003 | .0306 | -.0812 |
| 340.000 | | | .6362 | .2023 | .1716 | .7405 | | -.3070 | | -.0971 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0813 | .2049 | .3580 | .2725 | -.1808 | -.1857 | -.1626 | | -.1331 | -.1304 |
| 40.000 | -.0208 | .1441 | .2635 | -.0022 | -.2178 | -.2400 | -.2430 | | -.1275 | -.1377 |
| 70.000 | .0151 | -.0869 | -.0376 | .1109 | .0000 | .0008 | -.0966 | | | |
| 90.000 | .0237 | -.0446 | .1053 | .1231 | .0061 | -.0008 | -.0343 | | | |
| 105.000 | | | .1889 | .1205 | -.0825 | -.0842 | -.0792 | | | |
| 110.000 | | | | | | | | -.1603 | | |
| 120.000 | -.0020 | .0157 | .2312 | .1198 | .0547 | -.1003 | -.1771 | -.1867 | | |
| 135.000 | | | .3022 | .3348 | .1003 | .0254 | .0049 | | | |
| 150.000 | -.0212 | .0170 | .3072 | .3617 | .1743 | .1248 | .0560 | | | |
| 165.000 | -.0235 | | .3055 | | .3924 | .2038 | -.1418 | | | |
| 180.000 | -.0208 | .0081 | .3085 | .4545 | | | | | | |
| 320.000 | .0009 | .2107 | .3967 | .1337 | -.2191 | -.1603 | -.1969 | | | |

ARC87-019 IABI LVAP(ALLML SEALED) ORB. FUSELAGE (RET843)

ALPHAO( 2) = -4.189 BETAO ( 3) = 3.933

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1860 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4361 | 1.0200 | .5730 | .2710 | .2560 | 1.0980 | | -.0983 | | -.1500 | -.1149 | -.1015 | .1202 | .0306 | -.1518 |
| 20.000 | | | .5303 | .2390 | .2520 | .6601 | | -.1581 | | -.2927 | | | | | |
| 40.000 | | | .5254 | .2555 | .2205 | .4226 | | -.1794 | | -.1956 | -.0636 | -.0796 | -.0105 | -.2044 | -.1462 |
| 55.000 | | | .5396 | .2843 | .2357 | .3258 | | .0581 | | -.0445 | | | | | |
| 70.000 | | | .5448 | .3004 | .2454 | .2358 | | .1957 | | .0649 | -.2521 | -.2743 | -.1649 | -.0373 | |
| 90.000 | | .6025 | .5674 | .3451 | .2535 | .2141 | | .2870 | | .0000 | -.2253 | -.2704 | -.2299 | -.0448 | |
| 120.000 | | | .5883 | .4059 | .3177 | .2918 | | .4804 | | .0683 | -.1714 | -.3572 | -.2134 | -.1280 | |
| 140.000 | | | | | | | | | | -.0907 | | | | | |
| 150.000 | | | .6122 | .5097 | .4180 | .3714 | | | | -.1319 | -.2468 | -.1205 | -.1212 | -.1300 | |
| 151.000 | | | | | | | | | .6041 | | | | | | |
| 156.000 | | | | | | | | .8092 | | | | | | | |
| 162.000 | | | | | | | | | .7000 | | | | | | |
| 165.000 | | | | | | | | | | -.0989 | -.2472 | -.0785 | -.0914 | -.1092 | |
| 169.000 | | | | | | | | 1.0132 | | | | | | | |
| 174.000 | | | | | | | 1.0929 | | | | | | | | |
| 180.000 | 1.4381 | .8320 | .6435 | .5560 | .4899 | .4371 | | 1.0348 | | -.1871 | -.2223 | -.1150 | -.0820 | -.0936 | |
| 305.000 | | | .8639 | .6171 | .5190 | .4261 | | .1595 | | .0926 | | | | | |
| 320.000 | | | .7608 | .4479 | .3617 | .5902 | | -.0195 | | -.2109 | .0728 | -.1778 | .0206 | -.1366 | -.0444 |
| 340.000 | | | .6699 | .3160 | .2620 | .8100 | | -.2911 | | -.0826 | | | | | |

| X/LB | .052. | .7280 | .7780 | .8210 | .8790 | .9210 | .9800 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0605 | .2041 | .4054 | .2962 | -.1550 | -.1805 | -.1544 | | -.1205 | -.1222 |
| 40.000 | -.1290 | .0796 | .4236 | .2542 | -.2573 | -.1421 | -.1728 | | -.1268 | -.1314 |
| 70.000 | .0045 | -.0831 | -.0239 | .1807 | .0000 | .0471 | -.0703 | | | |
| 90.000 | .0051 | -.0408 | .0610 | .1950 | .0725 | .0120 | -.0245 | | | |
| 105.000 | | | .1781 | .1496 | -.0119 | -.0470 | -.0538 | | | |
| 110.000 | | | | | | | | -.1534 | | |
| 120.000 | -.0298 | .0023 | .1963 | .0265 | .0431 | -.1049 | -.2098 | -.1521 | | |
| 135.000 | | | .2469 | .2618 | .0874 | .0273 | -.0255 | | | |
| 150.000 | -.0580 | -.0245 | .2614 | .2909 | .1212 | .0625 | .0187 | | | |
| 165.000 | -.0672 | | .2601 | | .2780 | .1057 | -.1498 | | | |
| 180.000 | -.0821 | -.0388 | .2720 | .3124 | | | | | | |
| 320.000 | .0309 | .2257 | .3230 | -.0351 | -.1984 | -.1668 | -.2648 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET843)

ALPHAO( 3) = -2.122 BETAO ( 1) = .375

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4292 | 1.1483 | .5718 | .1762 | .1523 | .8617 | | -.1879 | | -.1337 | .0010 | -.1256 | .0864 | .0406 | -.0533 |
| 20.000 | | | .5925 | .2150 | .1562 | .6166 | | -.2585 | | -.1469 | | | | | |
| 40.000 | | | .6821 | .3060 | .1752 | .4400 | | -.1094 | | -.2937 | -.0492 | -.0460 | .0706 | -.1265 | -.0424 |
| 55.000 | | | .7017 | .4071 | .3083 | .2582 | | .1073 | | -.0011 | | | | | |
| 70.000 | | | .6917 | .4297 | .3273 | .2255 | | .1909 | | .1051 | -.2016 | -.2101 | -.1631 | -.0535 | |
| 90.000 | | .7845 | .6833 | .4568 | .3351 | .2517 | | .2875 | | .0000 | -.1752 | -.2184 | -.2156 | -.0403 | |
| 120.000 | | | .6679 | .5008 | .3873 | .3501 | | .5230 | | .1490 | -.1249 | -.3254 | -.1890 | -.0571 | |
| 140.000 | | | | | | | | | | .0538 | | | | | |
| 150.000 | | | .6373 | .5079 | .4322 | .3908 | | | | -.0965 | -.2600 | -.1686 | -.1259 | -.1182 | |
| 151.000 | | | | | | | | | .7062 | | | | | | |
| 156.000 | | | | | | | | .9564 | | | | | | | |
| 162.000 | | | | | | | | | .7717 | | | | | | |
| 165.000 | | | | | | | | | | -.1044 | -.2492 | -.1344 | -.1078 | -.1067 | |
| 169.000 | | | | | | | | 1.0648 | | | | | | | |
| 174.000 | | | | | | | 1.0441 | | | | | | | | |
| 180.000 | 1.4292 | .8105 | .5977 | .5137 | .4636 | .4099 | | 1.0448 | | -.2437 | -.2515 | -.0881 | -.1007 | -.1037 | |
| 305.000 | | | .6882 | .4061 | .3653 | .3235 | | .0544 | | -.0199 | | | | | |
| 320.000 | | | .6652 | .2763 | .2175 | .4972 | | -.1227 | | -.2789 | -.0150 | -.1279 | -.0125 | .0298 | -.0559 |
| 340.000 | | | .6306 | .1849 | .1508 | .7142 | | -.3315 | | -.1102 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0913 | .2253 | .3612 | .2707 | -.1768 | -.1798 | -.1545 | | -.1288 | -.1259 |
| 40.000 | .0094 | 1764 | .2935 | .0579 | -.2307 | -.2416 | -.2526 | | -.1160 | -.1278 |
| 70.000 | -.0028 | -.1067 | -.0795 | .0754 | .0000 | -.0211 | -.1150 | | | |
| 90.000 | .0061 | -.0681 | .0496 | .0856 | -.0195 | -.0234 | -.0521 | | | |
| 105.000 | | | .1646 | .1246 | -.1024 | -.1166 | -.0949 | | | |
| 110.000 | | | | | | | | -.1745 | | |
| 120.000 | -.0157 | -.0020 | .2175 | .1097 | .0549 | -.1067 | -.1808 | -.1871 | | |
| 135.000 | | | .2680 | .2925 | .0823 | 0032 | -.0189 | | | |
| 150.000 | -.0384 | .0053 | .2806 | .3296 | .1355 | .0928 | .0365 | | | |
| 165.000 | -.0384 | | .2813 | | .3537 | .1706 | -.1380 | | | |
| 180.000 | -.0388 | -.0057 | .2822 | .4151 | | | | | | |
| 320.000 | .0021 | .2409 | .4204 | .1744 | -.2217 | -.1683 | -.2006 | | | |

ORIGINAL PAGE

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET843)

ALPHAO( 4) = -.030 BETAO ( 1) = -5.879

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3204 | 1.0918 | .5865 | .2387 | .1528 | .9795 | | -.0789 | | -.1697 | -.0757 | -.1667 | -.0924 | -.0866 | -.0299 |
| 20.000 | | | .7055 | .3526 | .1470 | .7917 | | -.2868 | | -.1011 | | | | | |
| 40.000 | | | .8822 | .5279 | .3317 | .4071 | | .0114 | | -.2159 | -.0202 | -.0871 | .1355 | -.0640 | .0640 |
| 55.000 | | | .9379 | .6732 | .5108 | .3230 | | .1918 | | .0525 | | | | | |
| 70.000 | | | .9234 | .6761 | .5027 | .3230 | | .2296 | | .1593 | -.1351 | -.0620 | -.0568 | -.0274 | |
| 90.000 | | 1.0195 | .8773 | .6603 | .4830 | .3531 | | .2764 | | .0000 | -.0926 | -.1277 | -.1047 | -.0281 | |
| 120.000 | | | .7741 | .5860 | .4358 | .3857 | | .6009 | | .2557 | -.0349 | -.2464 | -.1755 | -.0805 | |
| 140.000 | | | | | | | | | | .2301 | | | | | |
| 150.000 | | | .6500 | .4737 | .3996 | .3680 | | | | .0632 | -.2864 | -.2393 | -.1610 | -.1008 | |
| 151.000 | | | | | | | | | .7800 | | | | | | |
| 156.000 | | | | | | | | .9497 | | | | | | | |
| 162.000 | | | | | | | | | .8255 | | | | | | |
| 165.000 | | | | | | | | | | -.1331 | -.2548 | -.1959 | -.1455 | -.1179 | |
| 169.000 | | | | | | | | 1.0381 | | | | | | | |
| 174.000 | | | | | | | .9155 | | | | | | | | |
| 180.000 | 1.3204 | .7790 | .5171 | .4295 | .3667 | .3356 | | .9371 | | -.2182 | -.2838 | -.1852 | -.1464 | -.1390 | |
| 305.000 | | | .4256 | .1474 | .1575 | .2878 | | -.0688 | | -.1722 | | | | | |
| 320.000 | | | .4979 | .1328 | .1601 | .3851 | | -.2829 | | -.2832 | -.1383 | -.1872 | -.1671 | .0532 | .0955 |
| 340.000 | | | .5708 | .1603 | .1469 | .6450 | | -.0811 | | -.3161 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .900 | .0854 | .3825 | .6589 | .3746 | -.1995 | -.1476 | -.1566 | | -.0902 | -.1090 |
| 40.000 | .1399 | .2059 | .4125 | -.0047 | -.2435 | -.1482 | -.2873 | | -.1261 | -.0682 |
| 70.000 | .0183 | -.1014 | -.1082 | -.1354 | .0000 | .0182 | -.0752 | | | |
| 90.000 | .0354 | -.0622 | -.0752 | .0971 | .0390 | -.0321 | -.0545 | | | |
| 105.000 | | | -.0699 | .1896 | .0043 | -.0923 | -.1154 | | | |
| 110.000 | | | | | | | | -.1852 | | |
| 120.000 | -.0737 | -.0947 | .1285 | .1966 | .0856 | -.0548 | -.1200 | -.1404 | | |
| 135.000 | | | .2355 | .2174 | .0579 | -.0517 | .0328 | | | |
| 150.000 | -.0988 | -.0874 | .2352 | .2145 | -.0358 | .1644 | .0902 | | | |
| 165.000 | -.1153 | | .2230 | | .4008 | .3005 | -.1174 | | | |
| 180.000 | -.1410 | .0479 | .2094 | .2003 | | | | | | |
| 320.000 | -.1038 | .4135 | .6371 | .4937 | -.1922 | -.1121 | -.1543 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET843)

ALPHA0( 4) = -.027 BETA0 ( 2) = -3.845

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4029 | 1.1408 | .5764 | .1982 | .1627 | .9617 | | -.0755 | | -.1932 | .0182 | -.1628 | -.0018 | -.0861 | -.0657 |
| 20.000 | | | .6687 | .3032 | .1333 | .7822 | | -.2979 | | -.1138 | | | | | |
| 40.000 | | | .8379 | .4628 | .2945 | .5556 | | -.0239 | | -.2505 | -.0593 | -.1090 | .0916 | -.0175 | -.0076 |
| 55.000 | | | .8605 | .6011 | .4587 | .3006 | | .1590 | | .0216 | | | | | |
| 70.000 | | | .8315 | .5995 | .4494 | .2862 | | .2088 | | .1340 | -.1622 | -.1309 | -.1127 | -.0361 | |
| 90.000 | | .9103 | .7887 | .5892 | .4347 | .3172 | | .2560 | | .0000 | -.1183 | -.1626 | -.1377 | -.0313 | |
| 120.000 | | | .7223 | .5521 | .4187 | .3784 | | .5697 | | .2206 | -.0693 | -.2719 | -.2011 | -.0739 | |
| 140.000 | | | | | | | | | | .1843 | | | | | |
| 150.000 | | | .6301 | .4753 | .4036 | .3720 | | | | -.0144 | -.2925 | -.2347 | -.1485 | -.1016 | |
| 151.000 | | | | | | | | | .7508 | | | | | | |
| 156.000 | | | | | | | | .9695 | | | | | | | |
| 162.000 | | | | | | | | | .7932 | | | | | | |
| 165.000 | | | | | | | | | | -.1270 | -.2499 | -.1867 | -.1405 | -.1157 | |
| 169.000 | | | | | | | | 1.0216 | | | | | | | |
| 174.000 | | | | | | | 1.0391 | | | | | | | | |
| 180.000 | 1.4039 | .7555 | .5263 | .4452 | .3880 | .3521 | | .9440 | | -.2212 | -.2767 | -.1617 | -.1393 | -.1304 | |
| 305.000 | | | .5091 | .2341 | .1841 | .3035 | | -.0325 | | -.1425 | | | | | |
| 320.000 | | | .5534 | .1787 | .1566 | .4200 | | -.2339 | | -.2464 | -.0899 | -.1719 | -.1043 | .0605 | .1148 |
| 340.000 | | | .5905 | .1515 | .1409 | .6443 | | -.1039 | | -.2957 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0329 | .3348 | .5954 | .3900 | -.1313 | -.1761 | -.1398 | | -.0981 | -.0951 |
| 40.000 | .0877 | .1749 | .3595 | .0033 | -.2036 | -.2501 | -.3003 | | -.0984 | -.0899 |
| 70.000 | -.0047 | -.1075 | -.1229 | -.0429 | .0000 | -.0019 | -.0905 | | | |
| 90.000 | .0172 | -.0690 | -.0799 | .1074 | .0040 | -.0471 | -.0670 | | | |
| 105.000 | | | -.0583 | .1610 | -.0314 | -.1152 | -.1140 | | | |
| 110.000 | | | | | | | | -.1753 | | |
| 120.000 | -.0484 | -.0622 | .2032 | .1807 | .0668 | -.0774 | -.1146 | -.1463 | | |
| 135.000 | | | .2170 | .2359 | .0750 | -.0318 | .0136 | | | |
| 150.000 | -.0794 | -.0504 | .2209 | .2471 | .0506 | .1331 | .0660 | | | |
| 165.000 | -.0896 | | .2199 | | .3858 | .2446 | -.1192 | | | |
| 180.000 | -.0883 | -.0429 | .2183 | .2580 | | | | | | |
| 320.000 | -.0171 | .3449 | .5547 | .3900 | -.2099 | -.1006 | -.1616 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB43)

ALPHAO( 4) = -.030 BETAO ( 3) = -1.739

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5181 | 1.1550 | .5685 | .1665 | .1381 | .8254 | | -.1321 | | -.1859 | .0223 | -.0594 | -.0512 | -.0223 | -.1065 |
| 20.000 | | | .6142 | .2398 | .1397 | .6929 | | -.3008 | | -.1347 | | | | | |
| 40.000 | | | .7469 | .3678 | .2318 | .5038 | | -.0681 | | -.2800 | -.0995 | -.0652 | .0427 | -.0249 | .0119 |
| 55.000 | | | .7797 | .4964 | .3880 | .2648 | | .1254 | | -.0140 | | | | | |
| 70.000 | | | .7561 | .5076 | .3912 | .2430 | | .1800 | | .1021 | -.1909 | -.1764 | -.1463 | -.0621 | |
| 90.000 | | .8423 | .7300 | .5176 | .3784 | .2769 | | .2308 | | .0000 | -.1512 | -.1966 | -.1681 | -.0454 | |
| 120.000 | | | .6719 | .5099 | .3870 | .3512 | | .5444 | | .1777 | -.1056 | -.2985 | -.2008 | -.0826 | |
| 140.000 | | | | | | | | | | .1321 | | | | | |
| 150.000 | | | .6059 | .4712 | .3985 | .3617 | | | | -.0662 | -.2833 | -.2075 | -.1383 | -.1170 | |
| 151.000 | | | | | | | | | .7118 | | | | | | |
| 156.000 | | | | | | | | .9481 | | | | | | | |
| 162.000 | | | | | | | | | .7645 | | | | | | |
| 165.000 | | | | | | | | | | -.1253 | -.2749 | -.1825 | -.1341 | -.1203 | |
| 169.000 | | | | | | | | 1.0216 | | | | | | | |
| 174.000 | | | | | | | 1.0459 | | | | | | | | |
| 180.000 | 1.5181 | .7466 | .5360 | .4584 | .4017 | .3608 | | .9769 | | -.2429 | -.2743 | -.1377 | -.1322 | -.1261 | |
| 305.000 | | | .6004 | .2897 | .2513 | .3096 | | .0075 | | -.1008 | | | | | |
| 320.000 | | | .6158 | .1963 | .1358 | .4075 | | -.1852 | | -.1905 | -.0675 | -.1604 | -.0755 | .0439 | .0654 |
| 340.000 | | | .6107 | .1409 | .1070 | .5720 | | -.1529 | | -.1685 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0076 | .2967 | .4915 | .3237 | -.1572 | -.1861 | -.1427 | | -.1069 | -.1069 |
| 40.000 | .0866 | .1960 | .3404 | -.0359 | -.1969 | -.2401 | -.3121 | | -.0895 | -.0919 |
| 70.000 | -.0143 | -.1153 | -.1173 | .0132 | .0000 | -.0180 | -.1035 | | | |
| 90.000 | .0027 | -.0722 | -.0725 | .1109 | -.0265 | -.0485 | -.0709 | | | |
| 105.000 | | | .0603 | .1507 | -.0734 | -.1363 | -.1071 | | | |
| 110.000 | | | | | | | | -.1796 | | |
| 120.000 | -.0378 | -.0300 | .1964 | .1542 | .0498 | -.0924 | -.1460 | -.1639 | | |
| 135.000 | | | .2379 | .2547 | .0591 | -.0174 | -.0171 | | | |
| 150.000 | -.0614 | -.0100 | .2388 | .2590 | .1069 | .1078 | .0381 | | | |
| 165.000 | -.0633 | | .2372 | | .3234 | .2122 | -.1166 | | | |
| 180.000 | -.0591 | -.0169 | .2424 | .3296 | | | | | | |
| 320.000 | -.0480 | .3224 | .4628 | .3517 | -.1825 | -.1303 | -.1649 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET843)

ALPHAO( 4) = -.019 BETAO ( 4) = .351

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5173 | 1.1488 | .5582 | .1498 | .1217 | .8286 | | -.1574 | | -.1717 | -.0103 | -.1244 | -.0191 | .0473 | .0584 |
| 20.000 | | | .5847 | .1865 | .1364 | .5441 | | -.2010 | | -.1864 | | | | | |
| 40.000 | | | .6828 | .2857 | .1380 | .4011 | | -.1251 | | -.3099 | -.0642 | -.0516 | .0547 | -.1086 | -.0422 |
| 55.000 | | | .6952 | .3936 | .2864 | .2309 | | .0792 | | -.0520 | | | | | |
| 70.000 | | | .6818 | .4105 | .3093 | .1923 | | .1429 | | .0779 | -.2192 | -.2292 | -.1702 | -.0833 | |
| 90.000 | | .7841 | .6748 | .4380 | .3170 | .2223 | | .2114 | | .0000 | -.1841 | -.2293 | -.2124 | -.0619 | |
| 120.000 | | | .6277 | .4597 | .3471 | .3120 | | .5136 | | .1330 | -.1438 | -.3309 | -.2140 | -.0932 | |
| 140.000 | | | | | | | | | | .0409 | | | | | |
| 150.000 | | | .5843 | .4577 | .3874 | .3430 | | | | -.1141 | -.2840 | -.2009 | -.1530 | -.1355 | |
| 151.000 | | | | | | | | | .6688 | | | | | | |
| 156.000 | | | | | | | | .9188 | | | | | | | |
| 162.000 | | | | | | | | | .7309 | | | | | | |
| 165.000 | | | | | | | | | | -.1290 | -.2750 | -.1670 | -.1408 | -.1322 | |
| 169.000 | | | | | | | | 1.0127 | | | | | | | |
| 174.000 | | | | | | | 1.0180 | | | | | | | | |
| 180.000 | 1.5173 | .7302 | .5388 | .4670 | .4142 | .3647 | | .9968 | | -.2644 | -.2734 | -.1213 | -.1328 | -.1300 | |
| 305.000 | | | .6723 | .4070 | .3685 | .3155 | | .0445 | | -.0622 | | | | | |
| 320.000 | | | .6534 | .2643 | .2189 | .4825 | | -.1337 | | -.2908 | -.0397 | -.1504 | -.0367 | .0480 | -.0021 |
| 340.000 | | | .6144 | .1574 | .1355 | .7079 | | -.3291 | | -.1244 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1120 | .2629 | .3805 | .2826 | -.1665 | -.1727 | -.1514 | | -.1229 | -.1216 |
| 40.000 | .0769 | .2256 | .3322 | .1097 | -.2387 | -.2348 | -.2569 | | -.1024 | -.1151 |
| 70.000 | -.0204 | -.1247 | -.1144 | .0451 | .0000 | -.0339 | -.1173 | | | |
| 90.000 | -.0057 | -.0752 | .0468 | .0928 | -.0470 | -.0502 | -.0727 | | | |
| 105.000 | | | .1332 | .0915 | -.1058 | -.1332 | -.1143 | | | |
| 110.000 | | | | | | | | -.1879 | | |
| 120.000 | -.0299 | -.0199 | .2033 | .1303 | .0592 | -.1049 | -.1784 | -.1807 | | |
| 135.000 | | | .2073 | .2272 | .0872 | -.0092 | -.0372 | | | |
| 150.000 | -.0501 | -.0065 | .2353 | .2852 | .0996 | .0703 | .0158 | | | |
| 165.000 | -.0524 | | .2533 | | .3149 | .1418 | -.1335 | | | |
| 180.000 | -.0556 | -.0144 | .2559 | .3759 | | | | | | |
| 320.000 | .0347 | .2908 | .4382 | .1971 | -.2211 | -.1667 | -.2178 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET843)

ALPHAO( 4) = -.003 BETAO ( 5) = 2.455

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4430 | 1.1604 | .5920 | .2071 | .1607 | 1.0337 | | -.1358 | | -.1992 | -.0639 | -.1086 | .0042 | .0195 | .0741 |
| 20.000 | | | .5721 | .2071 | .1629 | .6617 | | -.1794 | | -.2921 | | | | | |
| 40.000 | | | .6177 | .2673 | .1375 | .4325 | | -.1661 | | -.2759 | -.0347 | -.1253 | .0293 | -.1429 | -.0763 |
| 55.000 | | | .6133 | .3353 | .2409 | .2659 | | .0503 | | -.0843 | | | | | |
| 70.000 | | | .6000 | .3554 | .2580 | .2032 | | .1275 | | .0484 | -.2409 | -.2608 | -.2132 | -.0732 | |
| 90.000 | | .6656 | .5962 | .3865 | .2666 | .1988 | | .2357 | | .0000 | -.2075 | -.2565 | -.2469 | -.0697 | |
| 120.000 | | | .5892 | .4324 | .3215 | .2827 | | .4814 | | .1012 | -.1670 | -.3548 | -.2215 | -.1285 | |
| 140.000 | | | | | | | | | | -.0341 | | | | | |
| 150.000 | | | .5679 | .4540 | .3781 | .3288 | | | | -.1365 | -.2807 | -.1954 | -.1623 | -.1569 | |
| 151.000 | | | | | | | | | .6256 | | | | | | |
| 156.000 | | | | | | | | .8850 | | | | | | | |
| 162.000 | | | | | | | | | .7002 | | | | | | |
| 165.000 | | | | | | | | | | -.1298 | -.2788 | -.1365 | -.1425 | -.1420 | |
| 169.000 | | | | | | | | .9974 | | | | | | | |
| 174.000 | | | | | | | 1.0391 | | | | | | | | |
| 180.000 | 1.4430 | .7335 | .5537 | .4743 | .4185 | .3664 | | .9926 | | -.2409 | -.2653 | -.1448 | -.1346 | -.1316 | |
| 305.000 | | | .7795 | .5303 | .4468 | .3508 | | .0824 | | -.0132 | | | | | |
| 320.000 | | | .7724 | .3875 | .2986 | .5438 | | -.0760 | | -.2631 | -.0045 | -.1753 | .0045 | -.0113 | -.0370 |
| 340.000 | | | .6821 | .2421 | .1606 | .7870 | | -.3411 | | -.1278 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1282 | .2644 | .4149 | .3215 | -.1530 | -.1700 | -.1422 | | -.1098 | -.1114 |
| 40.000 | -.1095 | .2369 | .4714 | .2665 | -.2547 | -.1638 | -.1769 | | -.1030 | -.1182 |
| 70.000 | -.0223 | -.1101 | -.0610 | .0670 | .0000 | -.0469 | -.1357 | | | |
| 90.000 | -.0070 | -.0659 | .0631 | .0735 | -.0511 | -.0560 | -.0767 | | | |
| 105.000 | | | .1521 | .0940 | -.1276 | -.1462 | -.1247 | | | |
| 110.000 | | | | | | | | -.1899 | | |
| 120.000 | -.0282 | -.0025 | .1939 | .0564 | .0196 | -.1390 | -.2181 | -.1620 | | |
| 135.000 | | | .2520 | .2587 | .0551 | -.0420 | -.0695 | | | |
| 150.000 | -.0545 | -.0048 | .2601 | .2626 | .0931 | .0352 | -.0306 | | | |
| 165.000 | -.0623 | | .2559 | | .2737 | .1104 | -.1419 | | | |
| 180.000 | -.0750 | -.0178 | .2468 | .3163 | | | | | | |
| 320.000 | .1275 | .2799 | .3416 | .0391 | -.2136 | -.1649 | -.2518 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB43)

ALPHAO( 4) = .009 BETAO ( 6) = 3.897

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4184 | 1.1015 | .5896 | .2040 | .1277 | 1.0037 | | -.1323 | | -.1766 | -.1136 | -.1949 | -.1009 | .0506 | -.0887 |
| 20.000 | | | .5407 | .1687 | .1404 | .6277 | | -.1941 | | -.3096 | | | | | |
| 40.000 | | | .5265 | .1977 | .1181 | .3932 | | -.2100 | | -.2399 | -.0915 | -.1358 | .0115 | -.1716 | -.1095 |
| 55.000 | | | .5033 | .2470 | .1700 | .2743 | | .0090 | | -.1075 | | | | | |
| 70.000 | | | .4970 | .2597 | .1891 | .1792 | | .1033 | | .0261 | -.2671 | -.2947 | -.2340 | -.0761 | |
| 90.000 | | .5512 | .5182 | .3021 | .2069 | .1696 | | .2224 | | .0000 | -.2385 | -.2913 | -.2745 | -.0825 | |
| 120.000 | | | .5255 | .3686 | .2638 | .2345 | | .4332 | | .0567 | -.2013 | -.3783 | -.2410 | -.1754 | |
| 140.000 | | | | | | | | | | -.0976 | | | | | |
| 150.000 | | | .5195 | .4182 | .3388 | .2835 | | | | -.1624 | -.2908 | -.1815 | -.1713 | -.1719 | |
| 151.000 | | | | | | | | | .5602 | | | | | | |
| 156.000 | | | | | | | | .8304 | | | | | | | |
| 162.000 | | | | | | | | | .6545 | | | | | | |
| 165.000 | | | | | | | | | | -.1441 | -.2912 | -.1363 | -.1484 | -.1472 | |
| 159.000 | | | | | | | | .9615 | | | | | | | |
| 174.000 | | | | | | | .9006 | | | | | | | | |
| 180.000 | 1.4164 | .6970 | .5347 | .4545 | .3955 | .3385 | | .9720 | | -.2257 | -.2695 | -.1732 | -.1423 | -.1326 | |
| 305.000 | | | .8641 | .6031 | .5020 | .3299 | | .1176 | | .0164 | | | | | |
| 320.000 | | | .8119 | .4316 | .3159 | .5322 | | -.0353 | | -.2192 | .0708 | -.1576 | -.0748 | -.1644 | -.0210 |
| 340.000 | | | .6999 | .2581 | .1512 | .7764 | | -.3443 | | -.1059 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1906 | .2761 | .4519 | .3541 | -.1584 | -.1724 | -.1433 | | -.1076 | -.1118 |
| 40.000 | -.1023 | .2104 | .5160 | .3716 | -.2768 | -.1542 | -.1721 | | -.1101 | -.1218 |
| 70.000 | -.0178 | -.1020 | .0365 | .1494 | .0000 | .0046 | -.1011 | | | |
| 90.000 | -.0067 | -.0581 | .1133 | .1618 | .0437 | -.0097 | -.0517 | | | |
| 105.000 | | | .1871 | .1780 | -.0318 | -.0679 | -.0819 | | | |
| 110.000 | | | | | | | | -.1829 | | |
| 120.000 | -.0324 | .0085 | .2002 | .1035 | .0557 | -.1017 | -.1900 | -.1510 | | |
| 135.000 | | | .2278 | .2344 | .1087 | -.0037 | -.0501 | | | |
| 150.000 | -.0789 | .0013 | .2294 | .2302 | .1324 | .0440 | -.0144 | | | |
| 165.000 | -.1039 | | .2206 | | .1941 | .0933 | -.1449 | | | |
| 180.000 | -.1286 | -.0590 | .2210 | .2422 | | | | | | |
| 320.000 | .1311 | .2971 | .3625 | .0108 | -.1812 | -.1738 | -.2753 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET843)

ALPHAO( 4) = .019 BETAO ( 7) = 8.597

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3934 | 1.0534 | .5743 | .1958 | .0828 | .9462 | | -.1382 | | -.1618 | -.2129 | -.1788 | -.1900 | .0353 | -.0992 |
| 80.000 | | | .4934 | .1306 | .1028 | .5747 | | -.2098 | | -.2955 | | | | | |
| 40.000 | | | .4251 | .1401 | .0933 | .3311 | | -.2553 | | -.2439 | -.1399 | -.1419 | -.0422 | -.0931 | .0605 |
| 95.000 | | | .3915 | .1513 | .1041 | .2274 | | -.0211 | | -.1272 | | | | | |
| 70.000 | | | .4121 | .1675 | .1156 | .1380 | | .0833 | | .0015 | -.2859 | -.3183 | -.2500 | -.0839 | |
| 90.000 | | .4423 | .4467 | .2176 | .1389 | .1355 | | .2133 | | .0000 | -.2592 | -.3105 | -.2892 | -.0855 | |
| 120.000 | | | .4648 | .3052 | .1908 | .1797 | | .3901 | | .0192 | -.2209 | -.3927 | -.2637 | -.2146 | |
| 140.000 | | | | | | | | | | -.1621 | | | | | |
| 150.000 | | | .4737 | .3828 | .2936 | .2443 | | | | -.1882 | -.2975 | -.1664 | -.1824 | -.1802 | |
| 151.000 | | | | | | | | | .4813 | | | | | | |
| 156.000 | | | | | | | | .8097 | | | | | | | |
| 162.000 | | | | | | | | | .5967 | | | | | | |
| 165.000 | | | | | | | | | | -.1827 | -.2946 | -.1572 | -.1553 | -.1554 | |
| 169.000 | | | | | | | | .9067 | | | | | | | |
| 174.000 | | | | | | | .9653 | | | | | | | | |
| 180.000 | 1.3934 | .6766 | .5083 | .4311 | .3664 | .3133 | | .9028 | | -.2325 | -.2689 | -.1868 | -.1457 | -.1359 | |
| 305.000 | | | .9618 | .7087 | .5633 | .3492 | | .1542 | | .0442 | | | | | |
| 320.000 | | | .8554 | .4846 | .3359 | .4106 | | .0006 | | -.1859 | .1210 | -.1186 | -.0007 | -.1219 | .0352 |
| 340.000 | | | .7109 | .2737 | .1434 | .8006 | | -.3267 | | -.0892 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1709 | .3134 | .4609 | .3757 | -.1673 | -.1836 | -.1554 | | -.1185 | -.1175 |
| 40.000 | -.1135 | .2062 | .5719 | .4541 | -.2811 | -.1526 | -.1687 | | -.1207 | -.1334 |
| 70.000 | .0514 | -.0429 | -.0310 | .1002 | .0000 | -.0229 | -.1342 | | | |
| 90.000 | .0660 | .0160 | .0293 | .1610 | .0019 | -.0561 | -.0890 | | | |
| 105.000 | | | .0853 | .2560 | -.1018 | -.1190 | -.1167 | | | |
| 110.000 | | | | | | | | -.1908 | | |
| 120.000 | -.0097 | .0475 | .1828 | .2491 | -.0007 | -.1183 | -.2103 | -.1836 | | |
| 135.000 | | | .1997 | .2110 | .0759 | -.0295 | -.0913 | | | |
| 150.000 | -.0175 | .1432 | .1763 | .2116 | .1078 | -.0081 | -.0686 | | | |
| 165.000 | -.0741 | | .1705 | | .1472 | .0449 | -.1677 | | | |
| 180.000 | -.1619 | .1217 | .1936 | .1494 | | | | | | |
| 320.000 | .1842 | .3258 | .3793 | -.0375 | -.2002 | -.1872 | -.2974 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB43)

ALPHAO( 5) = 2.072 BETAO ( 1) = .352

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5192 | 1.1603 | .5525 | .1237 | .1056 | .8226 | | -.1516 | | -.1550 | .0014 | -.1242 | -.0686 | .0511 | .0998 |
| 20.000 | | | .5859 | .1712 | .1170 | .5260 | | -.2066 | | -.1814 | | | | | |
| 40.000 | | | .6850 | .2816 | .1295 | .3968 | | -.1286 | | -.3103 | -.0911 | -.0692 | .0104 | -.0419 | -.0117 |
| 55.000 | | | .6919 | .3908 | .2877 | .2129 | | .0613 | | -.0749 | | | | | |
| 70.000 | | | .6697 | .4054 | .3017 | .1706 | | .1213 | | .0349 | -.2237 | -.1955 | -.1880 | -. 100 | |
| 90.000 | | .7685 | .6554 | .4236 | .3048 | .2015 | | .1616 | | .0000 | -.1955 | -.2288 | -.2167 | -.0820 | |
| 120.000 | | | .5967 | .4268 | .3137 | .2819 | | .4891 | | .1206 | -.1544 | -.3333 | -.2202 | -.1282 | |
| 140.000 | | | | | | | | | | .0368 | | | | | |
| 150.000 | | | .5392 | .4144 | .3490 | .3089 | | | | -.1287 | -.3031 | -.2301 | -.1744 | -.1410 | |
| 151.000 | | | | | | | | | .6402 | | | | | | |
| 156.000 | | | | | | | | .8887 | | | | | | | |
| 162.000 | | | | | | | | | .7002 | | | | | | |
| 165.000 | | | | | | | | | | -.1511 | -.2979 | -.1947 | -.1680 | -.1420 | |
| 169.000 | | | | | | | | .9700 | | | | | | | |
| 174.000 | | | | | | | 1.0133 | | | | | | | | |
| 180.000 | 1.5192 | .6599 | .4909 | .4226 | .3699 | .3280 | | .9560 | | -.2828 | -.2957 | -.1492 | -.1603 | -.1425 | |
| 305.000 | | | .6710 | .4038 | .3661 | .2994 | | .0235 | | -.0795 | | | | | |
| 320.000 | | | .6601 | .2675 | .2196 | .4599 | | -.1534 | | -.2992 | -.0111 | -.1900 | - 0499 | .0720 | .0536 |
| 340.000 | | | .6139 | .1387 | .1201 | .7027 | | -.3488 | | -.1357 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1639 | .3189 | .4320 | .3224 | -.1492 | -.1658 | -.1478 | | -.1169 | -.1149 |
| 40.000 | .1425 | .2803 | .3766 | .1350 | -.2173 | -.2241 | -.2518 | | -.0909 | -.1126 |
| 70.000 | -.0305 | -.1355 | -.1351 | -.0039 | .0000 | -.0453 | -.1274 | | | |
| 90.000 | -.0104 | -.0857 | -.0715 | .0906 | -.0496 | -.0990 | -.1092 | | | |
| 105.000 | | | .0792 | .1402 | -.0945 | -.1678 | -.1442 | | | |
| 110.000 | | | | | | | | -.1845 | | |
| 120.000 | -.0406 | -.0208 | .1720 | .1587 | .0169 | -.1056 | -.1725 | -.1771 | | |
| 135.000 | | | .1697 | .2325 | .054 | -.0143 | -.0575 | | | |
| 150.000 | -.0604 | .0159 | .1707 | .2583 | .1096 | .0555 | -.0071 | | | |
| 165.000 | -.0614 | | .2086 | | .2725 | .1155 | -.1290 | | | |
| 180.000 | -.0653 | -.0094 | .2261 | .3353 | | | | | | |
| 320.000 | .1251 | .3484 | .4713 | .2185 | -.2176 | -.1602 | -.2248 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB43)

ALPHA0( 6) = 3.555 BETA0 ( 1) = -3.614

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5005 | 1.1572 | .5394 | .1101 | .0952 | .6965 | | -.1264 | | -.1475 | .0429 | -.1593 | -.1612 | .0333 | .0108 |
| 20.000 | | | .6378 | .2140 | .0818 | .6140 | | -.3421 | | -.0772 | | | | | |
| 40.000 | | | .8269 | .4081 | .2331 | .2581 | | -.0323 | | -.1657 | -.0954 | -.1024 | .0279 | .0407 | .0795 |
| 55.000 | | | .8665 | .5760 | .4333 | .1948 | | .1141 | | .0527 | | | | | |
| 70.000 | | | .8266 | .5722 | .4262 | .2224 | | .1551 | | .0772 | -.1243 | -.0954 | -.1396 | -.0764 | |
| 90.000 | | .9306 | .7714 | .5543 | .3982 | .2591 | | .1694 | | .0000 | -.1114 | -.1421 | -.1593 | -.0863 | |
| 120.000 | | | .6343 | .4572 | .3221 | .2772 | | .4572 | | .1796 | -.0999 | -.2665 | -.2512 | -.1561 | |
| 140.000 | | | | | | | | | | .1424 | | | | | |
| 150.000 | | | .5106 | .3612 | .3071 | .2753 | | | | -.0577 | -.3295 | -.2901 | -.1877 | -.1521 | |
| 151.000 | | | | | | | | | .6904 | | | | | | |
| 156.000 | | | | | | | | .9275 | | | | | | | |
| 162.000 | | | | | | | | | .7206 | | | | | | |
| 165.000 | | | | | | | | | | -.1764 | -.2973 | -.2410 | -.1727 | -.1560 | |
| 169.000 | | | | | | | | .9513 | | | | | | | |
| 174.000 | | | | | | | 1.0170 | | | | | | | | |
| 180.000 | 1.5005 | .5991 | .4084 | .3472 | .2979 | .2654 | | .8592 | | -.2632 | -.3199 | -.2104 | -.1813 | -.1615 | |
| 305.000 | | | .4646 | .1783 | .1419 | .2339 | | -.0616 | | -.1667 | | | | | |
| 320.000 | | | .5218 | .1105 | .0996 | .3265 | | -.2412 | | -.1835 | -.1114 | -.2005 | -.1338 | .0410 | .0983 |
| 340.000 | | | .5547 | .0633 | .0887 | .4593 | | -.1345 | | -.0893 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1993 | .4025 | .5798 | .4366 | -.1807 | -.1960 | -.1518 | | -.0880 | -.0980 |
| 40.000 | .1601 | .2543 | .3952 | .0093 | -.1823 | -.1585 | -.2414 | | -.0397 | -.0864 |
| 70.000 | -.0354 | -.1389 | -.1655 | -.1606 | .0000 | -.0535 | -.1165 | | | |
| 90.000 | -.0191 | -.0998 | -.1355 | .0482 | -.0340 | -.0832 | -.1129 | | | |
| 105.000 | | | -.1250 | .0970 | -.0441 | -.1494 | -.1665 | | | |
| 110.000 | | | | | | | | -.2161 | | |
| 120.000 | -.1355 | -.1459 | .1712 | .1348 | .0586 | -.1002 | -.1622 | -.1768 | | |
| 135.000 | | | .2095 | .1858 | .0306 | -.1115 | -.0843 | | | |
| 150.000 | -.1095 | -.0422 | .1950 | .1865 | -.1386 | .0552 | .0410 | | | |
| 155.000 | -.1056 | | .1800 | | .2787 | .1684 | -.1288 | | | |
| 180.000 | -.0858 | .0394 | .1901 | .2054 | | | | | | |
| 320.000 | .1802 | .4625 | .6351 | .4994 | -.1820 | -.0944 | -.1372 | | | |

ARC97-019 1A81 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB43)

ALPHAO( 6) = 3.560 BETAO ( 2) = .365

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4998 | 1.1736 | .5436 | .0987 | .0933 | .8523 | | -.1556 | | -.1539 | .0122 | -.1360 | -.0973 | .0750 | .0968 |
| 20.000 | | | .5792 | .1467 | .0949 | .5450 | | -.2435 | | -.1649 | | | | | |
| 40.000 | | | .6829 | .2708 | .1252 | .3841 | | -.1387 | | -.2946 | -.1312 | -.0694 | -.0008 | .0080 | .0052 |
| 55.000 | | | .6895 | .3867 | 2863 | .2046 | | .0481 | | -.0759 | | | | | |
| 70.000 | | | .6618 | .3955 | .2904 | .1538 | | .0988 | | -.0055 | -.1966 | -.1915 | -.1908 | -.1267 | |
| 90.000 | | .7494 | .6429 | .4056 | .2875 | .1835 | | .1379 | | .0000 | -.2033 | -.2136 | -.2307 | -.1004 | |
| 120.000 | | | .5685 | .3943 | .2778 | .2560 | | .4619 | | .1094 | -.1650 | -.3381 | -.2424 | -.1456 | |
| 140.000 | | | | | | | | | | .0346 | | | | | |
| 150.000 | | | .4944 | .3696 | .3062 | .2706 | | | | -.1440 | -.3251 | -.2540 | -.1902 | -.1546 | |
| 151.000 | | | | | | | | | .6180 | | | | | | |
| 155.000 | | | | | | | | .8709 | | | | | | | |
| 162.000 | | | | | | | | | .6672 | | | | | | |
| 165.000 | | | | | | | | | | -.1724 | -.3174 | -.2196 | -.1915 | -.1452 | |
| 169.000 | | | | | | | | .9361 | | | | | | | |
| 174.000 | | | | | | | .9829 | | | | | | | | |
| 180.000 | 1.4998 | .5946 | .4449 | .3797 | .3267 | .2889 | | .9134 | | -.3009 | -.3152 | -.1750 | -.1858 | -.1407 | |
| 305.000 | | | .6851 | .4015 | .3519 | .2791 | | .0046 | | -.0974 | | | | | |
| 320.000 | | | .6633 | .2610 | .2059 | .4403 | | -.1472 | | -.2924 | -.0040 | -.2088 | -.0549 | . .99 | .0916 |
| 340.000 | | | .6093 | .1227 | .1052 | .6993 | | -.3618 | | -.1341 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .2097 | .3627 | .4729 | .3563 | -.1273 | -.1509 | -.1403 | | -.1092 | -.1098 |
| 40.000 | .1834 | .3145 | .4119 | .1343 | -.2158 | -.1822 | -.2179 | | -.0941 | -.1111 |
| 70.000 | -.0351 | -.1449 | -.1618 | -.0450 | .0000 | -.0599 | -.1374 | | | |
| 90.000 | -.0206 | -.0969 | -.1130 | .0678 | -.0595 | -.1096 | -.1297 | | | |
| 105.000 | | | .0323 | .1184 | -.0970 | -.1903 | -.1899 | | | |
| 110.000 | | | | | | | | -.1835 | | |
| 120.000 | -.0573 | -.0350 | .1646 | .1565 | -.0081 | -.1265 | -.1795 | -.1700 | | |
| 135.000 | | | .1798 | .2220 | .0561 | -.0421 | -.0759 | | | |
| 150.000 | -.0563 | .0523 | .1730 | .2313 | .1249 | .0323 | -.0350 | | | |
| 165.000 | -.0583 | | .1898 | | .2300 | .0950 | -.1278 | | | |
| 180.000 | -.0615 | .0106 | .2065 | .2910 | | | | | | |
| 320.000 | .2032 | .3718 | .4984 | .2313 | -.2036 | -.1394 | -.1893 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETBN3)

ALPHA0( 6) = 3.570 BETA0 ( 3) = 3.907

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4638 | 1.1581 | .5440 | .0968 | .0463 | .9684 | | -.1753 | | -.1757 | -.1275 | -.1492 | -.1289 | .0153 | .1524 |
| 20.000 | | | .4943 | .0747 | .0538 | .5796 | | -.2354 | | -.2979 | | | | | |
| 40.000 | | | .4735 | .1246 | .0466 | .3488 | | -.2240 | | -.2840 | -.0567 | -.1823 | .0014 | .0463 | .1004 |
| 55.000 | | | .4435 | .1903 | .1189 | .2300 | | -.0232 | | -.1536 | | | | | |
| 70.000 | | | .4468 | .2093 | .1417 | .1296 | | .0551 | | -.0242 | -.2730 | -.2790 | -.2586 | -.0935 | |
| 90.000 | | .4984 | .4778 | .2513 | .1549 | .1230 | | .1184 | | .0000 | -.2548 | -.2902 | -.2789 | -.0945 | |
| 120.000 | | | .4584 | .3025 | .2007 | .1836 | | .3950 | | .0393 | -.2273 | -.3851 | -.2545 | -.1559 | |
| 140.000 | | | | | | | | | | -.1084 | | | | | |
| 150.000 | | | .4234 | .3306 | .2632 | .2155 | | | | -.1996 | -.3323 | -.2409 | -.2156 | -.1822 | |
| 151.000 | | | | | | | | | .5128 | | | | | | |
| 156.000 | | | | | | | | .7572 | | | | | | | |
| 162.000 | | | | | | | | | .5912 | | | | | | |
| 165.000 | | | | | | | | | | -.1919 | -.3294 | -.1890 | -.1963 | -.1715 | |
| 169.000 | | | | | | | | .9012 | | | | | | | |
| 174.000 | | | | | | | .8452 | | | | | | | | |
| 180.000 | 1.4638 | .5377 | .4228 | .3552 | .3014 | .2512 | | .8722 | | -.2726 | -.3160 | -.2232 | -.1862 | -.1693 | |
| 305.000 | | | .8926 | .5862 | .4830 | .2670 | | .0828 | | .0342 | | | | | |
| 320.000 | | | .8051 | .3695 | .2638 | .3204 | | -.2478 | | -.1300 | .0606 | -.1799 | -.0236 | -.1012 | .0284 |
| 340.000 | | | .6671 | .1578 | .0573 | .7549 | | -.3532 | | -.0886 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .2015 | .3508 | .4934 | .3985 | -.1175 | -.1501 | -.1369 | | -.0941 | -.1015 |
| 40.000 | .0332 | .3684 | .5900 | .4466 | -.2665 | -.1071 | -.1433 | | -.1018 | -.1166 |
| 70.000 | -.0300 | -.0651 | -.0626 | .0432 | .0000 | -.0199 | -.1143 | | | |
| 90.000 | -.0006 | -.0574 | .0306 | .1324 | -.0150 | -.0518 | -.0898 | | | |
| 105.000 | | | .1230 | .1799 | -.0732 | -.1295 | -.1233 | | | |
| 110.000 | | | | | | | | -.2026 | | |
| 120.000 | -.0222 | .0746 | .2151 | .1724 | .0371 | -.1208 | -.1997 | -.1782 | | |
| 135.000 | | | .2076 | .2089 | .0546 | -.0409 | -.0834 | | | |
| 150.000 | -.0538 | .1233 | .1882 | .1653 | .0752 | .0126 | -.0473 | | | |
| 165.000 | -.0758 | | .1709 | | .1530 | .0685 | -.1540 | | | |
| 180.000 | -.1174 | .1169 | .1808 | .1882 | | | | | | |
| 320.000 | .2233 | .3313 | .3765 | .0190 | -.1533 | -.1511 | -.2226 | | | |

ARC97-019 !A81 LVAP(ALLML SEALED) ORB. FUSELAGE (RET843)

ALPHA0( 7) = 6.256 BETA0 ( 1) = .389

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4879 | 1.1856 | .5262 | .0754 | .0578 | .0424 | | -.1414 | | -.1544 | -.0031 | -.1642 | -.0340 | .0930 | .1290 |
| 20.000 | | | .5599 | .1193 | .0562 | .5630 | | -.2556 | | -.1595 | | | | | |
| 40.000 | | | .6723 | .2527 | .1209 | .3782 | | -.1304 | | -.2989 | -.1689 | -.0771 | .0229 | .0507 | .0058 |
| 55.000 | | | .6776 | .3833 | .2853 | .1890 | | .0438 | | -.0665 | | | | | |
| 70.000 | | | .6518 | .3861 | .2837 | .1417 | | .0851 | | -.0138 | -.2053 | -.2031 | -.1908 | -.1228 | |
| 90.000 | | .7378 | .6250 | .3909 | .2695 | .1707 | | .1153 | | .0000 | -.1890 | -.2275 | -.2446 | -.1102 | |
| 120.000 | | | .5407 | .3637 | .2452 | .2278 | | .4326 | | .1063 | -.1721 | -.3283 | -.2822 | -.1232 | |
| 140.000 | | | | | | | | | | .0352 | | | | | |
| 150.000 | | | .4522 | .3283 | .2727 | .2386 | | | | -.1594 | -.3434 | -.2768 | -.2044 | -.1637 | |
| 151.000 | | | | | | | | | .6070 | | | | | | |
| 156.000 | | | | | | | | .8700 | | | | | | | |
| 162.000 | | | | | | | | | .6483 | | | | | | |
| 165.000 | | | | | | | | | | -.1932 | -.3339 | -.2392 | -.2054 | -.1617 | |
| 169.000 | | | | | | | | .9255 | | | | | | | |
| 174.000 | | | | | | | .9403 | | | | | | | | |
| 180.000 | .4878 | .5413 | .4002 | .3384 | .2945 | .2487 | | .8957 | | -.3205 | -.3313 | -.1978 | -.2031 | -.1578 | |
| 305.000 | | | .6909 | .3858 | .3400 | .2614 | | -.0046 | | -.0575 | | | | | |
| 320.000 | | | .6792 | .2404 | .1865 | .4110 | | -.1424 | | -.2608 | -.0149 | -.2332 | -.0321 | .1390 | .1618 |
| 340.000 | | | .5992 | .0937 | .0810 | .6757 | | -.3754 | | -.1199 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .2579 | .4070 | .5176 | .3875 | -.1623 | -.1604 | -.1501 | | -.1175 | -.1217 |
| 40.000 | .2261 | .3482 | .4483 | .1634 | -.2509 | -.1555 | -.1813 | | -.1108 | -.1111 |
| 70.000 | -.0437 | -.1649 | -.1742 | -.0648 | .0000 | -.0828 | -.1475 | | | |
| 90.000 | -.0316 | -.1156 | -.1339 | .0529 | -.0773 | -.1261 | -.1452 | | | |
| 105.000 | | | .0310 | .1041 | -.1028 | -.1968 | -.2142 | | | |
| 110.000 | | | | | | | | -.1913 | | |
| 120.000 | -.0823 | -.0493 | .1621 | .1382 | .0103 | -.1414 | -.1910 | -.1684 | | |
| 135.000 | | | .1717 | .2092 | .0268 | -.0744 | -.0947 | | | |
| 150.000 | -.0487 | .0558 | .1708 | .2279 | .0969 | .0210 | -.0447 | | | |
| 165.000 | -.0429 | | .1859 | | .2127 | .0768 | -.1317 | | | |
| 180.000 | -.0394 | .0452 | .1933 | .2854 | | | | | | |
| 320.000 | .2451 | .3991 | .4973 | .2399 | -.1581 | -.1668 | -.2003 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB44) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2000.0000 SQ.FT. XMRP = 878.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.000 RN/FT = 2.500
ELV-IB = 8.000 ELV-OB = .000
RUDDER = .000 SPOILR = .000

ALPHA0( 1) = -8.288 BETA0 ( 1) = .071

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0480 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5727 | .8478 | .2468 | .6919 | .3675 | .6123 | | .0870 | | -.0372 | .2268 | -.0661 | -.0541 | .0582 | -.0059 |
| 20.000 | | | .2491 | .6639 | .4042 | .4984 | | .0624 | | -.0124 | | | | | |
| 40.000 | | | .3975 | .3762 | .4774 | .5208 | | .1523 | | -.0775 | .0484 | .0015 | -.0062 | .0363 | .0549 |
| 55.000 | | | .5102 | .3765 | .5202 | .3334 | | .3192 | | .1610 | | | | | |
| 70.000 | | | .5783 | .3157 | .3350 | .3988 | | .3590 | | .2535 | .0116 | -.0186 | -.0084 | -.0226 | |
| 90.000 | | .7993 | .6358 | .3910 | .2775 | .3131 | | .3487 | | .0000 | .0474 | -.0223 | -.0528 | -.0184 | |
| 120.000 | | | .6994 | .5270 | .3878 | .3434 | | .6014 | | .3543 | .0695 | -.1217 | -.0326 | -.0285 | |
| 140.000 | | | | | | | | | | .2236 | | | | | |
| 150.000 | | | .7055 | .5699 | .4909 | .4310 | | | | .1285 | -.0726 | -.0152 | .0102 | .0191 | |
| 151.000 | | | | | | | | | .9297 | | | | | | |
| 156.000 | | | | | | | | 1.2482 | | | | | | | |
| 162.000 | | | | | | | | | 1.0435 | | | | | | |
| 165.000 | | | | | | | | | | .1114 | -.0969 | .0106 | .0363 | .0293 | |
| 169.000 | | | | | | | | 1.2720 | | | | | | | |
| 174.000 | | | | | | | 1.0320 | | | | | | | | |
| 180.000 | 1.5727 | 1.0019 | .6873 | .5717 | .5150 | .4758 | | 1.2887 | | -.0293 | -.0625 | .0105 | .0450 | .0335 | |
| 205.000 | | | .4672 | .3566 | .4964 | .3914 | | .2648 | | .1338 | | | | | |
| 320.000 | | | .3170 | .6039 | .4574 | .5022 | | .1011 | | .0201 | .1586 | -.0010 | -.0377 | -.0182 | -.0039 |
| 340.000 | | | .2609 | .6990 | .3765 | .4455 | | .0453 | | .0295 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9800 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0020 | .2128 | .3820 | .3872 | -.1557 | -.1438 | -.1830 | | -.1088 | -.1157 |
| 40.000 | -.0818 | .1101 | .3070 | -.0531 | -.2107 | -.1207 | -.1962 | | -.1308 | -.1072 |
| 70.000 | .0516 | -.0227 | -.0185 | .1111 | .0000 | .0559 | .0068 | | | |
| 90.000 | .0552 | .0263 | -.0043 | .1635 | .0618 | .0420 | .0236 | | | |
| 105.000 | | | .0570 | .1807 | .0173 | -.0502 | -.0506 | | | |
| 110.030 | | | | | | | | -.0941 | | |
| 120.000 | .0298 | .0541 | .1471 | .2009 | .1054 | .0200 | -.0556 | -.1233 | | |
| 135.000 | | | .1893 | .3308 | .1811 | .0818 | .0766 | | | |
| 150.000 | .0102 | .0208 | .1296 | .3326 | .1788 | .1949 | .1590 | | | |
| 165.000 | .0125 | | .0425 | | .4159 | .2770 | -.0968 | | | |
| 180.000 | .0161 | .0132 | .0323 | .4119 | | | | | | |
| 320.000 | -.0325 | .1039 | .3863 | .0645 | -.1586 | -.1410 | -.1989 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB44)

ALPHAO( 2) = -4.258 BETAO ( 1) = -4.163

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5271 | .7936 | .3936 | .5993 | .2414 | .5409 | | .0409 | | .0294 | .1726 | -.0138 | .0184 | -.0147 | -.0025 |
| 20.000 | | | .4055 | .6672 | .3533 | .5116 | | -.0806 | | .0992 | | | | | |
| 40.000 | | | .4671 | .7023 | .5491 | .2934 | | .2224 | | -.0320 | .1054 | -.0384 | .0110 | .0977 | -.0081 |
| 55.000 | | | .6026 | .7017 | .6540 | .4040 | | .3502 | | .2101 | | | | | |
| 70.000 | | | .6716 | .5561 | .6048 | .4663 | | .3512 | | .2584 | .0379 | .0281 | .0174 | -.0237 | |
| 90.000 | | .9053 | .7210 | .4889 | .4992 | .4849 | | .3650 | | .0000 | .0743 | .0203 | -.0147 | -.0225 | |
| 120.000 | | | .7493 | .5565 | .4441 | .4959 | | .6255 | | .4318 | .1184 | -.0857 | -.0511 | -.0106 | |
| 140.000 | | | | | | | | | | .3378 | | | | | |
| 150.000 | | | .7021 | .5336 | .4612 | .4419 | | | | .2184 | -.0852 | -.0529 | -.0225 | .0005 | |
| 151.000 | | | | | | | | | 1.0186 | | | | | | |
| 156.000 | | | | | | | | 1.1261 | | | | | | | |
| 162.000 | | | | | | | | | 1.1235 | | | | | | |
| 165.000 | | | | | | | | | | .0953 | -.0829 | -.0501 | -.0270 | .0021 | |
| 169.000 | | | | | | | | 1.2464 | | | | | | | |
| 174.000 | | | | | | | 1.0396 | | | | | | | | |
| 180.000 | 1.5271 | .9518 | .6023 | .4937 | .4406 | .4075 | | 1.2207 | | -.0180 | -.1157 | -.0266 | -.0147 | -.0044 | |
| 305.000 | | | .3294 | .4106 | .3314 | .2531 | | .1490 | | .0411 | | | | | |
| 320.000 | | | .3681 | .4963 | .3066 | .3211 | | .0152 | | -.0241 | .0762 | -.0674 | -.0890 | -.0504 | -.0455 |
| 340.000 | | | .3949 | .5497 | .2405 | .3285 | | .0201 | | -.0560 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0550 | .2274 | .4513 | .2846 | -.1903 | -.2485 | -.1150 | | -.0951 | -.0928 |
| 40.000 | -.1224 | .0852 | .2464 | -.0521 | -.3077 | -.0512 | -.1645 | | -.1550 | -.1377 |
| 70.000 | .0402 | -.0291 | -.0277 | .0270 | .0 | .0508 | .0062 | | | |
| 90.000 | .0524 | .0228 | -.0195 | .1538 | .1089 | .0370 | .0059 | | | |
| 105.000 | | | .0006 | .2016 | .0550 | -.0318 | -.0509 | | | |
| 110.000 | | | | | | | | -.0936 | | |
| 120.000 | .0369 | .0447 | .0329 | .2422 | .1886 | .0364 | -.0335 | -.1018 | | |
| 135.000 | | | .2095 | .2737 | .1797 | .0449 | .0301 | | | |
| 150.000 | -.0018 | .0144 | .2184 | .2494 | .0385 | .1982 | .1769 | | | |
| 165.000 | -.0031 | | .1851 | | .4212 | .3401 | -.0395 | | | |
| 180.000 | -.0150 | -.0198 | .1291 | .2389 | | | | | | |
| 320.000 | .0143 | .0872 | .4056 | .2172 | -.1199 | -.1573 | -.1705 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB44)

ALPHAO( 2) = -4.231 BETAO ( 2) = .037

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5293 | .8270 | .3566 | .7112 | .3108 | .5184 | | .0388 | | -.0550 | .1993 | -.0794 | -.0741 | .0289 | -.0078 |
| 20.000 | | | .3425 | .7086 | .3294 | .4262 | | .0350 | | -.0329 | | | | | |
| 40.000 | | | .3768 | .6784 | .4282 | .4452 | | .1401 | | -.0885 | .0554 | -.0300 | -.0297 | .0273 | .0437 |
| 55.000 | | | .4802 | .4436 | .4710 | .3027 | | .2934 | | .1356 | | | | | |
| 70.000 | | | .5430 | .3706 | .4539 | .3616 | | .3133 | | .2102 | -.0073 | -.0332 | -.0303 | -.0586 | |
| 90.000 | | .7586 | .5995 | .3658 | .3182 | .3252 | | .3066 | | .0000 | .0323 | -.0364 | -.0695 | -.0458 | |
| 120.000 | | | .6531 | .4867 | .3503 | .3423 | | .5670 | | .3503 | .0522 | -.1278 | -.0638 | -.0245 | |
| 140.000 | | | | | | | | | | .2739 | | | | | |
| 150.000 | | | .6441 | .5118 | .4342 | .3818 | | | | .1184 | -.0907 | -.0506 | -.0168 | -.0045 | |
| 151.000 | | | | | | | | | .8992 | | | | | | |
| 156.000 | | | | | | | | 1.0586 | | | | | | | |
| 162.000 | | | | | | | | | 1.0236 | | | | | | |
| 165.000 | | | | | | | | | | .0859 | -.1135 | -.0168 | .0064 | .0057 | |
| 169.000 | | | | | | | | 1.2533 | | | | | | | |
| 174.000 | | | | | | | 1.0113 | | | | | | | | |
| 180.000 | 1.5293 | .9380 | .6040 | .5108 | .4564 | .4194 | | 1.2616 | | -.0508 | -.0855 | -.0094 | .0147 | .0093 | |
| 305.000 | | | .4477 | .4745 | .4564 | .3539 | | .2335 | | .1087 | | | | | |
| 320.000 | | | .3812 | .5642 | .4130 | .4246 | | .0790 | | -.0086 | .1405 | -.0310 | -.0651 | -.0137 | -.0147 |
| 340.000 | | | .3703 | .6578 | .3294 | .3635 | | .0298 | | .0103 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0212 | .2442 | .3638 | .3460 | -.1598 | -.1533 | -.1539 | | -.1032 | -.1134 |
| 40.000 | -.0852 | .1409 | .2763 | -.0325 | -.2138 | -.1170 | -.1963 | | -.1173 | -.1049 |
| 70.000 | .0221 | -.0435 | -.0483 | .0761 | .0000 | .0311 | -.0155 | | | |
| 90.000 | .0313 | .0030 | -.0332 | .1347 | .0410 | .0212 | .0025 | | | |
| 105.000 | | | .0119 | .1519 | -.0018 | -.0521 | -.0680 | | | |
| 110.000 | | | | | | | | -.0995 | | |
| 120.000 | .0001 | .0310 | .1107 | .1762 | .1697 | .0045 | -.0541 | -.1300 | | |
| 135.000 | | | .1630 | .2869 | .1604 | .0602 | .0419 | | | |
| 150.000 | -.0130 | -.0045 | .1123 | .2892 | .1539 | .1544 | .1311 | | | |
| 165.000 | -.0101 | | .0221 | | .3635 | .2364 | -.1084 | | | |
| 180.000 | -.0071 | -.0088 | .0060 | .3635 | | | | | | |
| 320.000 | -.0360 | .1331 | .3914 | .1075 | -.1552 | -.1471 | -.2094 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET844)

ALPHAO( 2) = -4.258 BETAO ( 3) = 3.599

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5222 | .7987 | .3191 | .6614 | .2653 | .5347 | | -.0034 | | .0386 | .0937 | -.0207 | -.1454 | .0218 | .0111 |
| 20.000 | | | .3076 | .6126 | .2552 | .2802 | | .0058 | | -.0759 | | | | | |
| 40.000 | | | .2714 | .5573 | .3118 | .2976 | | .0435 | | -.0341 | .0399 | -.0113 | -.0557 | .0285 | .0147 |
| 55.000 | | | .3412 | .3548 | .3356 | .1665 | | .1842 | | .0607 | | | | | |
| 70.000 | | | .3970 | .2630 | .3147 | .1626 | | .2562 | | .1552 | -.0473 | -.0862 | -.0673 | -.0554 | |
| 90.000 | | .6091 | .4498 | .2419 | .1977 | .1863 | | .1871 | | .0000 | -.0178 | -.0821 | -.1148 | -.0522 | |
| 120.000 | | | .5117 | .3709 | .2477 | .2159 | | .4169 | | .1933 | -.0454 | -.1663 | -.0747 | -.0737 | |
| 140.000 | | | | | | | | | | .0755 | | | | | |
| 150.000 | | | .5472 | .4474 | .3805 | .3156 | | | | .0419 | -.1462 | -.0608 | -.0142 | -.0197 | |
| 151.000 | | | | | | | | | .7130 | | | | | | |
| 156.000 | | | | | | | | .9118 | | | | | | | |
| 162.000 | | | | | | | | | .9432 | | | | | | |
| 165.000 | | | | | | | | | | .0221 | -.1115 | -.0444 | -.0104 | -.0079 | |
| 169.000 | | | | | | | | 1.1892 | | | | | | | |
| 174.000 | | | | | | | 1.0232 | | | | | | | | |
| 180.000 | 1.5222 | .9016 | .5831 | .4901 | .4367 | .3966 | | 1.2319 | | -.0405 | -.1190 | -.0287 | -.0158 | -.0066 | |
| 305.000 | | | .5706 | .5142 | .6712 | .4303 | | .3114 | | .1959 | | | | | |
| 320.000 | | | .3770 | .7392 | .5928 | .2919 | | .1755 | | -.0188 | .1657 | -.0454 | -.0586 | .0311 | -.0050 |
| 340.000 | | | .3327 | .7028 | .3715 | .5167 | | -.1103 | | .0879 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0860 | .1656 | .3086 | .3995 | -.1500 | -.1609 | -.1338 | | -.0999 | -.1041 |
| 40.000 | -.0312 | .0629 | .4241 | .0446 | -.2162 | -.1632 | -.1561 | | -.1120 | -.1172 |
| 70.000 | .0180 | -.0420 | -.0442 | .0732 | .0000 | .0046 | -.0404 | | | |
| 90.000 | .0203 | .0046 | -.0261 | .1337 | -.0105 | -.0159 | -.0286 | | | |
| 105.000 | | | .0867 | .1035 | -.0470 | -.0980 | -.0994 | | | |
| 110.000 | | | | | | | | -.1331 | | |
| 120.000 | -.0443 | .0015 | .1393 | .0892 | .0704 | -.0437 | -.1217 | -.1741 | | |
| 135.000 | | | .1580 | .2343 | .1033 | .0022 | -.0188 | | | |
| 150.000 | -.0253 | -.0373 | .1215 | .2511 | .1165 | .0533 | .0376 | | | |
| 165.000 | -.0217 | | .0923 | | .2413 | .1333 | -.1374 | | | |
| 180.000 | -.0089 | -.0179 | .1429 | .2603 | | | | | | |
| 320.000 | -.0253 | .1847 | .3359 | -.0632 | -.1639 | -.1417 | -.1797 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB44)

ALPHAO( 3) = -2.161 BETAO ( 1) = .037

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4823 | .8158 | .5742 | .6322 | .2247 | .3979 | | .0242 | | -.0753 | .1715 | -.0702 | -.0909 | .0027 | .0002 |
| 20.000 | | | .5264 | .6480 | .2838 | .3404 | | .0239 | | -.0519 | | | | | |
| 40.000 | | | .5136 | .6319 | .3951 | .3577 | | .1279 | | -.0962 | .0486 | -.0517 | -.0439 | .0124 | .0448 |
| 55.000 | | | .4938 | .5516 | .4529 | .2581 | | .2669 | | .1131 | | | | | |
| 70.000 | | | .5136 | .4400 | .4208 | .3227 | | .2717 | | .1760 | -.0267 | -.0514 | -.0510 | -.0870 | |
| 90.000 | | .7181 | .5601 | .3748 | .3526 | .3240 | | .2640 | | .0000 | .0152 | -.0517 | -.0870 | -.0748 | |
| 120.000 | | | .6033 | .4478 | .3263 | .3308 | | .5065 | | .3297 | .0348 | -.1382 | -.0925 | -.0455 | |
| 140.000 | | | | | | | | | | .2698 | | | | | |
| 150.000 | | | .5934 | .4606 | .3902 | .3484 | | | | .1073 | -.1133 | -.0825 | -.0414 | -.0277 | |
| 151.000 | | | | | | | | | .8600 | | | | | | |
| 156.000 | | | | | | | | .9462 | | | | | | | |
| 162.000 | | | | | | | | | 1.0042 | | | | | | |
| 165.000 | | | | | | | | | | .0612 | -.1328 | -.0433 | -.0182 | -.0195 | |
| 169.000 | | | | | | | | 1.1794 | | | | | | | |
| 174.000 | | | | | | | .9487 | | | | | | | | |
| 180.000 | 1.4823 | .8722 | .5508 | .4545 | .4066 | .3651 | | 1.2037 | | -.0692 | -.1098 | -.0314 | -.0105 | -.0172 | |
| 305.000 | | | .6030 | .4989 | .3812 | .2996 | | .2068 | | .0914 | | | | | |
| 320.000 | | | .6213 | .5712 | .2964 | .3417 | | .0685 | | -.0007 | .1255 | -.0732 | -.0713 | -.0195 | -.0277 |
| 340.000 | | | .6149 | .5837 | .2256 | .2922 | | .0178 | | .0122 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0385 | .2112 | .3586 | .3392 | -.1587 | -.1399 | -.1532 | | -.1032 | -.1134 |
| 40.000 | -.0835 | .1505 | .2646 | -.0084 | -.2044 | -.1083 | -.1853 | | -.0973 | -.1068 |
| 70.000 | -.0051 | -.0648 | -.0664 | .0410 | .0000 | .0091 | -.0310 | | | |
| 90.000 | .0048 | -.0208 | -.0555 | .1065 | .0193 | -.0041 | -.0202 | | | |
| 105.000 | | | -.0153 | .1319 | -.0153 | -.0748 | -.0887 | | | |
| 110.000 | | | | | | | | -.1182 | | |
| 120.000 | -.0254 | .0087 | .0845 | .1551 | .1498 | -.0052 | -.0828 | -.1346 | | |
| 135.000 | | | .1342 | .2488 | .1423 | .0361 | .0073 | | | |
| 150.000 | -.0348 | -.0282 | .1006 | .2508 | .1298 | .1180 | .1023 | | | |
| 165.000 | -.0330 | | .0156 | | .3156 | .1982 | -.1159 | | | |
| 180.000 | -.0287 | -.0328 | -.0021 | .3218 | | | | | | |
| 320.000 | -.0330 | .1572 | .3977 | .1298 | -.1452 | -.1444 | -.2102 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB44)

ALPHA0( 4) = -.093 BETA0 ( 1) = -8.250

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4359 | .7729 | .6774 | .5108 | .1745 | .4985 | | .0817 | | .0388 | -.0180 | .0109 | -.0301 | -.0185 | .0381 |
| 20.000 | | | .7170 | .6295 | .3138 | .4242 | | -.0890 | | .1000 | | | | | |
| 40.000 | | | .7854 | .7357 | .5478 | .2901 | | .2141 | | -.0153 | .0951 | -.0639 | -.0307 | .0663 | .0394 |
| 55.000 | | | .7940 | .7584 | .6738 | .3916 | | .3214 | | .1910 | | | | | |
| 70.000 | | | .7579 | .6828 | .6212 | .4393 | | .2987 | | .2189 | .0148 | .0184 | .0149 | -.0252 | |
| 90.000 | | .8904 | .7371 | .6142 | .5600 | .4556 | | .3217 | | .0000 | .0524 | .0207 | -.0082 | -.0461 | |
| 120.000 | | | .7039 | .5555 | .4617 | .4399 | | .4403 | | .3996 | .1087 | -.0808 | -.0998 | -.0789 | |
| 140.000 | | | | | | | | | | .3855 | | | | | |
| 150.000 | | | .6084 | .4385 | .3887 | .3701 | | | | .2207 | -.1426 | -.1155 | -.1013 | -.0643 | |
| 151.000 | | | | | | | | | .9543 | | | | | | |
| 156.000 | | | | | | | | 1.0518 | | | | | | | |
| 162.000 | | | | | | | | | 1.0317 | | | | | | |
| 165.000 | | | | | | | | | | .0261 | -.1138 | -.1180 | -.0914 | -.0614 | |
| 169.000 | | | | | | | | 1.1109 | | | | | | | |
| 174.000 | | | | | | | .8928 | | | | | | | | |
| 180.000 | 1.4359 | .7956 | .4794 | .3718 | .3275 | .3112 | | 1.0122 | | -.0487 | -.1695 | -.0962 | -.0827 | -.0650 | |
| 305.000 | | | .4191 | .2771 | .2029 | .1569 | | .0590 | | -.0179 | | | | | |
| 320.000 | | | .5648 | .3625 | .1867 | .2113 | | -.0608 | | -.0996 | .0005 | -.1274 | -.1527 | -.0130 | -.0768 |
| 340.000 | | | .6722 | .4148 | .1770 | .3288 | | .0030 | | -.0869 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0296 | .3122 | .4938 | .3061 | -.1776 | -.2353 | -.0916 | | -.0420 | -.0721 |
| 40.000 | -.0077 | .1866 | .2546 | -.0943 | -.2055 | -.0084 | -.1423 | | -.1950 | -.1275 |
| 70.000 | .0188 | -.0539 | -.0473 | -.0651 | .0000 | .0264 | -.0112 | | | |
| 90.000 | .0207 | -.0103 | -.0395 | .0245 | .0713 | .0205 | -.0233 | | | |
| 105.000 | | | -.0385 | .1752 | .0954 | -.0222 | -.0599 | | | |
| 110.000 | | | | | | | | -.1102 | | |
| 120.000 | -.0486 | -.0441 | -.0529 | .1694 | .1326 | .0205 | -.0305 | -.1011 | | |
| 135.000 | | | .1325 | .1592 | .1136 | .0012 | -.0312 | | | |
| 150.000 | -.0490 | -.0418 | .1509 | .1182 | -.0733 | .0185 | .0852 | | | |
| 165.000 | -.0522 | | .1325 | | .3336 | .3027 | -.0459 | | | |
| 180.000 | -.0732 | -.0683 | .1020 | .0828 | | | | | | |
| 320.000 | .0505 | .1689 | .4617 | .2481 | -.0796 | -.1403 | -.1331 | | | |

ARC97-019 1A81 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB44)

ALPHAO( 4) = -.091 BETAO ( 2) = -4.198

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1580 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4099 | .8201 | .8830 | .4398 | .1920 | .5163 | | .0379 | | .0013 | .1222 | -.0427 | -.0166 | -.0468 | -.0151 |
| 20.000 | | | .7051 | .5296 | .2855 | .4518 | | -.1037 | | .0674 | | | | | |
| 40.000 | | | .7501 | .6244 | .5126 | .2936 | | .1987 | | -.0377 | .0582 | -.0741 | -.0269 | .0552 | .0032 |
| 55.000 | | | .7370 | .6362 | .6173 | .3548 | | .3025 | | .1625 | | | | | |
| 70.000 | | | .6996 | .5776 | .5603 | .3993 | | .2807 | | .2013 | .0035 | -.0104 | -.0214 | -.0593 | |
| 90.000 | | .8281 | .6779 | .5261 | .4880 | .4217 | | .3025 | | .0000 | .0401 | -.0092 | -.0445 | -.0692 | |
| 120.000 | | | .6613 | .5078 | .4060 | .4188 | | .4368 | | .3705 | .0860 | -.1100 | -.1074 | -.0782 | |
| 140.000 | | | | | | | | | | .3541 | | | | | |
| 150.000 | | | .5881 | .4303 | .3753 | .3657 | | | | .1798 | -.1316 | -.1161 | -.0914 | -.0475 | |
| 151.000 | | | | | | | | | .9274 | | | | | | |
| 156.000 | | | | | | | | 1.0348 | | | | | | | |
| 162.000 | | | | | | | | | 1.0192 | | | | | | |
| 165.000 | | | | | | | | | | .0443 | -.1232 | -.1135 | -.0837 | -.0446 | |
| 169.000 | | | | | | | | 1.1000 | | | | | | | |
| 174.000 | | | | | | | .9014 | | | | | | | | |
| 180.000 | 1.4099 | .8102 | .4840 | .3861 | .3432 | .3221 | | 1.0655 | | -.0550 | -.1546 | -.0804 | -.0622 | -.0488 | |
| 305.000 | | | .4856 | .3179 | .2495 | .1640 | | .0965 | | -.0026 | | | | | |
| 320.000 | | | .6052 | .3935 | .2067 | .2528 | | -.0063 | | -.0566 | .0368 | -.1106 | -.1375 | -.0835 | -.0439 |
| 340.000 | | | .6846 | .4105 | .1977 | .2803 | | .0013 | | -.0780 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0545 | .2403 | .5053 | .3330 | -.1458 | -.2383 | -.1218 | | -.0310 | -.0956 |
| 40.000 | .0349 | .1160 | .2861 | -.0288 | -.1904 | -.0409 | -.1533 | | -.1690 | -.1148 |
| 70.000 | -.0079 | -.0697 | -.0682 | -.0488 | .0000 | .0001 | -.0300 | | | |
| 90.000 | .0032 | -.0249 | -.0557 | .0904 | .0260 | -.0061 | -.0356 | | | |
| 105.000 | | | -.0456 | .1298 | .0326 | -.0547 | -.0771 | | | |
| 110.000 | | | | | | | | -.1206 | | |
| 120.000 | -.0253 | -.0209 | -.0012 | .1651 | .1352 | .0020 | -.0595 | -.1180 | | |
| 135.000 | | | .1249 | .1779 | .1192 | -.0042 | -.0441 | | | |
| 150.000 | -.0426 | -.0311 | .1551 | .1595 | -.0379 | .0759 | .1181 | | | |
| 165.000 | -.0465 | | .1423 | | .3133 | .2583 | -.0650 | | | |
| 180.000 | -.0589 | -.0528 | .1219 | .1572 | | | | | | |
| 320.000 | .0042 | .1055 | .4660 | .2733 | -.1173 | -.1520 | -.1634 | | | |

ARC97-019 IA81 LVAP(ALL HL SEALED) ORB. FUSELAGE (RETB44)

ALPHAO( 4) = -.090 BETAO ( 3) = -2.083

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4013 | .8084 | .6887 | .4711 | .2112 | .4372 | | -.0024 | | -.0735 | .1654 | -.0812 | -.0789 | -.0468 | .0208 |
| 20.000 | | | .7082 | .4878 | .2197 | .4628 | | -.0873 | | .0118 | | | | | |
| 40.000 | | | .7258 | .5514 | .3828 | .2829 | | .1578 | | -.0729 | .0363 | -.0858 | -.0465 | .0405 | -.0332 |
| 55.000 | | | .6929 | .5456 | .4637 | .3205 | | .2682 | | .1283 | | | | | |
| 70.000 | | | .6503 | .5045 | .4361 | .3580 | | .2541 | | .1687 | -.0268 | -.0459 | -.0474 | -.0856 | |
| 90.000 | | .7489 | .6308 | .4737 | .3921 | .3808 | | .2717 | | .0000 | .0068 | -.0384 | -.0750 | -.0914 | |
| 120.000 | | | .6209 | .4775 | .3654 | .3769 | | .4754 | | .3229 | .0424 | -.1316 | -.1126 | -.0739 | |
| 140.000 | | | | | | | | | | .2933 | | | | | |
| 150.000 | | | .5646 | .4329 | .3715 | .3391 | | | | .1350 | -.1343 | -.1139 | -.0805 | -.0473 | |
| 151.000 | | | | | | | | | .8576 | | | | | | |
| 156.000 | | | | | | | | .9261 | | | | | | | |
| 162.000 | | | | | | | | | .9988 | | | | | | |
| 165.000 | | | | | | | | | | .0385 | -.1453 | -.0918 | -.0593 | -.0444 | |
| 169.000 | | | | | | | | 1.0836 | | | | | | | |
| 174.000 | | | | | | | .8966 | | | | | | | | |
| 180.000 | 1.4013 | .8058 | .4903 | .4011 | .3606 | .3269 | | 1.1032 | | -.0806 | -.1486 | -.0728 | -.0378 | -.0427 | |
| 305.000 | | | .5505 | .4107 | .3067 | .2080 | | .1261 | | .0275 | | | | | |
| 320.000 | | | .6377 | .5045 | .2515 | .2499 | | .0067 | | -.0243 | .0696 | -.0988 | -.1197 | -.0709 | -.0165 |
| 340.000 | | | .6958 | .4708 | .2031 | .2349 | | .0253 | | -.0563 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0320 | .1558 | .4537 | .3009 | -.1616 | -.1967 | -.1249 | | -.0502 | -.1090 |
| 40.000 | .0054 | .0117 | .2878 | .0000 | -.1616 | -.0771 | -.1485 | | -.1302 | -.1109 |
| 70.000 | -.0270 | -.0811 | -.0805 | -.0023 | .0000 | -.0168 | -.0493 | | | |
| 90.000 | -.0178 | -.0349 | -.0654 | .0765 | .0042 | -.0272 | -.0516 | | | |
| 105.000 | | | -.0500 | .1100 | -.0079 | -.0807 | -.1000 | | | |
| 110.000 | | | | | | | | -.1337 | | |
| 120.000 | -.0267 | -.0115 | .1136 | .1530 | .1235 | -.0127 | -.0820 | -.1331 | | |
| 135.000 | | | .1652 | .1986 | .1426 | -.0002 | -.0189 | | | |
| 150.000 | -.0496 | -.0306 | .1544 | .1957 | .0295 | .1196 | .0829 | | | |
| 165.000 | -.0503 | | .1100 | | .2881 | .2164 | -.0833 | | | |
| 180.000 | -.0529 | -.0523 | .0118 | .2638 | | | | | | |
| 320.000 | .0116 | .2050 | .3478 | .2707 | -.1197 | -.1436 | -.2005 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB44)

ALPHAO( 4) = -.077 BETAO ( 4) = .009

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4319 | .9949 | .6776 | .4398 | .1908 | .2436 | | .0093 | | .0700 | .1290 | -.0638 | -.1061 | -.0242 | .0116 |
| 20.000 | | | .6524 | .4740 | .1606 | .2801 | | -.0324 | | -.0343 | | | | | |
| 40.000 | | | .6249 | .5101 | .2952 | .2361 | | .1368 | | -.0948 | .0360 | -.0428 | -.0584 | .0120 | .0312 |
| 55.000 | | | .5802 | .4609 | .3787 | .2555 | | .2504 | | .0968 | | | | | |
| 70.000 | | | .5605 | .4142 | .3544 | .3019 | | .2207 | | .1490 | -.0435 | -.0641 | -.0686 | -.1061 | |
| 90.000 | | .6798 | .5595 | .3812 | .3198 | .3019 | | .2306 | | .0000 | -.0021 | -.0597 | -.1026 | -.1010 | |
| 120.000 | | | .5668 | .4212 | .3083 | .2971 | | .4589 | | .2901 | .0205 | -.1499 | -.1166 | -.0590 | |
| 140.000 | | | | | | | | | | .2581 | | | | | |
| 150.000 | | | .5391 | .4119 | .3533 | .3083 | | | | .0976 | -.1342 | -.1099 | -.0670 | -.0474 | |
| 151.000 | | | | | | | | | .8011 | | | | | | |
| 156.000 | | | | | | | | .8579 | | | | | | | |
| 162.000 | | | | | | | | | .9604 | | | | | | |
| 165.000 | | | | | | | | | | .0369 | -.1494 | -.0664 | -.0434 | -.0403 | |
| 169.000 | | | | | | | | 1.0878 | | | | | | | |
| 174.000 | | | | | | | .8611 | | | | | | | | |
| 180.000 | 1.4319 | .7963 | .4944 | .4081 | .3684 | .3195 | | 1.1207 | | -.0854 | -.1326 | -.0530 | -.0338 | -.0393 | |
| 305.000 | | | .6425 | .4404 | .2952 | .2914 | | .1784 | | .0828 | | | | | |
| 320.000 | | | .7209 | .4733 | .1741 | .3489 | | .0732 | | -.0690 | .1164 | -.0997 | -.0754 | -.0393 | -.0373 |
| 340.000 | | | .7337 | .4267 | .1799 | .1996 | | .0002 | | .0624 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0262 | .2075 | .3411 | .3022 | -.1653 | -.1352 | -.1357 | | -.0959 | -.1030 |
| 40.000 | -.0749 | .1641 | .2669 | .0364 | -.2023 | -.1051 | -.1723 | | -.0812 | -.1099 |
| 70.000 | -.0305 | -.0804 | -.0831 | .0220 | .0000 | -.0191 | -.0535 | | | |
| 90.000 | -.0210 | -.0396 | -.0710 | .0665 | -.0050 | -.0266 | -.0405 | | | |
| 105.000 | | | -.0321 | .1162 | -.0328 | -.0881 | -.1034 | | | |
| 110.000 | | | | | | | | -.1354 | | |
| 120.000 | -.0387 | -.0124 | .1022 | .1259 | .1327 | -.0140 | -.0946 | -.1436 | | |
| 135.000 | | | .1045 | .2109 | .1154 | .0085 | -.0176 | | | |
| 150.000 | -.0548 | -.0425 | .0737 | .2185 | .0964 | .0845 | .0767 | | | |
| 165.000 | -.0520 | | .0039 | | .2806 | .1651 | -.1224 | | | |
| 180.000 | -.0491 | -.0517 | -.0029 | .2858 | | | | | | |
| 320.000 | -.0079 | .1729 | .4025 | .1232 | -.1411 | -.1442 | -.1984 | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET844)

ALPHAO( 4) = -.067 BETAO ( 5) = 2.124

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4572 | .7911 | .6673 | .4546 | .1844 | .4985 | | -.0174 | | -.0401 | .1435 | -.0719 | -.1220 | -.0272 | .0043 |
| 20.000 | | | .6450 | .4757 | .1922 | .2177 | | .0008 | | -.0772 | | | | | |
| 40.000 | | | .6071 | .4952 | .2452 | .2639 | | .0453 | | -.0651 | .0411 | -.0470 | -.0890 | -.0102 | .0432 |
| 55.000 | | | .5375 | .4334 | .3198 | .2038 | | .1624 | | .0463 | | | | | |
| 70.000 | | | .4849 | .3774 | .3115 | .1840 | | .1992 | | .1074 | -.0703 | -.0884 | -.0851 | -.1207 | |
| 90.000 | | .5895 | .4632 | .3458 | .2801 | .1937 | | .2267 | | .0090 | -.0341 | -.0925 | -.1168 | -.1056 | |
| 120.000 | | | .4862 | .3659 | .2668 | .2471 | | .3922 | | .2452 | -.0080 | -.1773 | -.1149 | -.0787 | |
| 140.000 | | | | | | | | | | .1260 | | | | | |
| 150.000 | | | .4833 | .3778 | .3182 | .2739 | | | | .0653 | -.1407 | - 0899 | -.0637 | -.0554 | |
| 151.000 | | | | | | | | | .7220 | | | | | | |
| 156.000 | | | | | | | | .9129 | | | | | | | |
| 162.000 | | | | | | | | | .8736 | | | | | | |
| 165.000 | | | | | | | | | | .0176 | -.1500 | -.0640 | -.0429 | -.0453 | |
| 169.000 | | | | | | | | 1.0080 | | | | | | | |
| 174.000 | | | | | | | .8623 | | | | | | | | |
| 180.000 | 1.4572 | .7825 | .4773 | .3890 | .3435 | .3038 | | 1.0932 | | -.0822 | -.1378 | -.0701 | -.0390 | -.0424 | |
| 305.000 | | | .6112 | .5061 | .5129 | .3256 | | .2319 | | .1209 | | | | | |
| 320.000 | | | .6606 | .5205 | .4132 | .3045 | | .1071 | | -.0587 | .1141 | -.0976 | -.0842 | -.0081 | -.0584 |
| 340.000 | | | .6929 | .4683 | .2342 | .5266 | | -.1329 | | .0337 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0770 | .1823 | .3610 | .2701 | -.1331 | -.1449 | -.1288 | | -.1065 | -.1120 |
| 40.000 | -.0499 | .0964 | .3734 | .1202 | -.2120 | -.1361 | -.1934 | | -.1071 | -.1094 |
| 70.000 | -.0365 | -.0754 | -.0756 | .0170 | .0000 | -.0313 | -.0674 | | | |
| 90.000 | -.0326 | -.0355 | -.0579 | .0727 | -.0189 | -.0359 | -.0520 | | | |
| 105.000 | | | -.0249 | .0930 | -.0599 | -.1063 | -.1186 | | | |
| 110.000 | | | | | | | | -.1454 | | |
| 120.000 | -.0652 | -.0209 | .0819 | .1202 | .1025 | -.0390 | -.1105 | -.1647 | | |
| 135.000 | | | .1415 | .2112 | .0989 | .0044 | -.0279 | | | |
| 150.000 | -.0584 | -.0599 | .1257 | .2065 | .0939 | .0465 | .0270 | | | |
| 165.000 | -.0571 | | .0668 | | .2191 | .1154 | -.1327 | | | |
| 180.000 | -.0548 | -.0537 | .0979 | .2518 | | | | | | |
| 320.000 | -.0270 | .1807 | .3398 | .0142 | -.1849 | -.1405 | -.1550 | | | |

ARC87-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB44)

ALPHAO( 4) = -.050 BETAO ( 8) = 3.572

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4244 | .7617 | .6508 | .5281 | .1753 | .4403 | | -.0022 | | -.0067 | .0500 | -.0814 | -.1638 | -.0127 | -.0486 |
| 20.000 | | | .5787 | .4813 | .1529 | .2377 | | .0029 | | -.1180 | | | | | |
| 40.000 | | | .4875 | .4522 | .2089 | .2400 | | .0141 | | -.0790 | .0306 | -.0617 | -.0964 | -.0133 | -.0172 |
| 55.000 | | | .4039 | .3897 | .2600 | .1465 | | .1359 | | .0151 | | | | | |
| 70.000 | | | .3571 | .3311 | .2823 | .0990 | | .1932 | | .0873 | -.0878 | -.1117 | -.1012 | -.1230 | |
| 90.000 | | .5267 | .3720 | .2736 | .2241 | .1494 | | .1628 | | .0000 | -.0475 | -.1086 | -.1357 | -.1054 | |
| 120.000 | | | .4198 | .2930 | .2054 | .2002 | | .3440 | | .1633 | -.0265 | -.1863 | -.1146 | -.0939 | |
| 140.000 | | | | | | | | | | .0690 | | | | | |
| 150.000 | | | .4374 | .3436 | .2891 | .2409 | | | | .0057 | -.1750 | -.0920 | -.0619 | -.0607 | |
| 151.000 | | | | | | | | | .6321 | | | | | | |
| 156.000 | | | | | | | | .7798 | | | | | | | |
| 162.000 | | | | | | | | | .8685 | | | | | | |
| 165.000 | | | | | | | | | | -.0278 | -.1479 | -.0891 | -.0472 | -.0528 | |
| 169.000 | | | | | | | | 1.0635 | | | | | | | |
| 174.000 | | | | | | | .8952 | | | | | | | | |
| 180.000 | 1.4244 | .7774 | .4687 | .3734 | .3380 | .3102 | | 1.0887 | | -.0778 | -.1589 | -.0804 | -.0635 | -.0512 | |
| 305.000 | | | .6571 | .6526 | .6002 | .3767 | | .2533 | | .1474 | | | | | |
| 320.000 | | | .6776 | .6687 | .4895 | .3086 | | .1567 | | -.0446 | .1271 | -.0875 | -.0785 | .0027 | -.0172 |
| 340.000 | | | .6917 | .5812 | .2936 | .3959 | | -.1209 | | .0616 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0809 | .2303 | .3496 | .3539 | -.1620 | -.1516 | -.1319 | | -.0972 | -.1047 |
| 40.000 | -.0532 | .0716 | .4203 | .0751 | -.2033 | -.1457 | -.1623 | | -.0939 | -.1021 |
| 70.000 | -.0332 | -.0825 | -.0858 | .0142 | .0000 | -.0390 | -.0790 | | | |
| 90.000 | -.0296 | -.0372 | -.0678 | .0669 | -.0358 | -.0446 | -.0649 | | | |
| 105.000 | | | .0200 | .0692 | -.0767 | -.1205 | -.1303 | | | |
| 110.000 | | | | | | | | -.1567 | | |
| 120.000 | -.0923 | -.0403 | .1013 | .0696 | .0545 | -.0669 | -.1342 | -.1842 | | |
| 135.000 | | | .1272 | .1713 | .0657 | -.0310 | -.0476 | | | |
| 150.000 | -.0643 | -.0737 | .1233 | .1628 | .0791 | -.0084 | -.0254 | | | |
| 165.000 | -.0643 | | .1131 | | .1308 | .0539 | -.1528 | | | |
| 180.000 | -.0610 | -.0550 | .1239 | .1658 | | | | | | |
| 320.000 | -.0006 | .2013 | .3159 | -.0194 | -.1774 | -.1195 | -.1626 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RE*B44)

ALPHAO( 4) = -.053 BETAO ( 7) = 6.276

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1590 | .1860 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3725 | .8177 | .6795 | .4836 | .1418 | .4495 | | -.0153 | | .0136 | -.0052 | -.0727 | -.1876 | -.0582 | -.0726 |
| 20.000 | | | .6170 | .3848 | .1638 | .1802 | | -.0603 | | -.0926 | | | | | |
| 40.000 | | | .5075 | .3374 | .1509 | .1524 | | -.0126 | | -.0974 | -.0116 | -.0692 | -.1015 | -.0550 | -.0710 |
| 55.000 | | | .3999 | .2898 | .1651 | .1078 | | .0815 | | -.0164 | | | | | |
| 70.000 | | | .3469 | .2723 | .1774 | .0913 | | .1256 | | .0639 | -.0992 | -.1234 | -.1104 | -.1216 | |
| 90.000 | | .4468 | .3274 | .2458 | .1709 | .0972 | | .0904 | | .0000 | -.0637 | -.1255 | -.1476 | -.1072 | |
| 120.000 | | | .3629 | .2588 | .1773 | .1573 | | .3067 | | .0995 | -.1021 | -.1847 | -.1120 | -.1248 | |
| 140.000 | | | | | | | | | | -.0032 | | | | | |
| 150.000 | | | .3986 | .3224 | .2591 | .2219 | | | | -.0181 | -.1880 | -.1149 | -.0858 | -.0680 | |
| 151.000 | | | | | | | | | .5643 | | | | | | |
| 156.000 | | | | | | | | .8959 | | | | | | | |
| 162.000 | | | | | | | | | .8097 | | | | | | |
| 165.000 | | | | | | | | | | -.0940 | -.1651 | -.1002 | -.0816 | -.0586 | |
| 169.000 | | | | | | | | 1.0198 | | | | | | | |
| 174.000 | | | | | | | .8505 | | | | | | | | |
| 180.000 | 1.3725 | .7437 | .4577 | .3723 | .3393 | .3096 | | 1.0354 | | -.0685 | -.1670 | -.1027 | -.0928 | -.0664 | |
| 305.000 | | | .8050 | .7356 | .6521 | .4214 | | .2834 | | .1815 | | | | | |
| 320.000 | | | .7852 | .6991 | .4879 | .2668 | | .2085 | | .0000 | .0785 | -.0864 | -.0634 | .0297 | -.0298 |
| 340.000 | | | .7497 | .5805 | .2478 | .4297 | | -.0951 | | .0904 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.1376 | .1104 | .3487 | .3405 | -.1917 | -.1413 | -.1227 | | -.0871 | -.0916 |
| 40.000 | -.0089 | .0823 | .4171 | .1408 | -.1976 | -.1328 | -.1256 | | -.0900 | -.1004 |
| 70.000 | -.0389 | -.0916 | -.0934 | .0001 | .0000 | -.0467 | -.0819 | | | |
| 90.000 | -.0389 | -.0501 | -.0609 | .0808 | -.0503 | -.0759 | -.0786 | | | |
| 105.000 | | | .0536 | .0565 | -.0850 | -.1295 | -.1334 | | | |
| 110.000 | | | | | | | | -.1661 | | |
| 120.000 | -.1187 | -.0819 | .0749 | .0099 | .0119 | -.0878 | -.1585 | -.1945 | | |
| 135.000 | | | .0880 | .1081 | .0328 | -.0584 | -.0861 | | | |
| 150.000 | -.0951 | -.0921 | .0792 | .1215 | .0440 | -.0630 | -.0728 | | | |
| 165.000 | -.0867 | | .0775 | | .0777 | .0144 | -.1520 | | | |
| 180.000 | -.0690 | -.0727 | .1005 | .0796 | | | | | | |
| 320.000 | -.0340 | .1946 | .3428 | -.0752 | -.1446 | -.0803 | -.1553 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB44)

ALPHA0( S) = 1.987 BETA0 ( 1) = .023

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3687 | 1.0814 | .7440 | .3983 | .1443 | .1705 | | .0159 | | .0834 | .1229 | -.0707 | -.1200 | -.0208 | -.0124 |
| 20.000 | | | .7277 | .4507 | .1311 | .1996 | | -.0486 | | .0138 | | | | | |
| 40.000 | | | .6901 | .4968 | .2229 | .2636 | | .1260 | | -.0984 | .0174 | -.0294 | -.0736 | -.0217 | .0040 |
| 55.000 | | | .6047 | .4494 | .3442 | .2697 | | .2149 | | .0813 | | | | | |
| 70.000 | | | .5696 | .4069 | .3240 | .2778 | | .1862 | | .1212 | -.0498 | -.0743 | -.0867 | -.0941 | |
| 90.000 | | .6560 | .5556 | .3842 | .3010 | .2720 | | .2117 | | .0000 | -.0197 | -.0678 | -.1114 | -.1085 | |
| 120.000 | | | .5371 | .3957 | .2904 | .2697 | | .4187 | | .2610 | .0103 | -.1600 | -.1363 | -.0880 | |
| 140.000 | | | | | | | | | | .2375 | | | | | |
| 150.000 | | | .4912 | .3694 | .3157 | .2720 | | | | .0874 | -.1472 | -.1319 | -.0877 | -.0649 | |
| 151.000 | | | | | | | | | .7431 | | | | | | |
| 156.000 | | | | | | | | .7852 | | | | | | | |
| 162.000 | | | | | | | | | .9077 | | | | | | |
| 165.000 | | | | | | | | | | .0177 | -.1614 | -.0902 | -.0630 | -.0587 | |
| 169.000 | | | | | | | | 1.0019 | | | | | | | |
| 174.000 | | | | | | | .7903 | | | | | | | | |
| 180.000 | 1.3687 | .7229 | .4421 | .3627 | .3265 | .2814 | | 1.0328 | | -.0962 | -.1527 | -.0720 | -.0528 | -.0587 | |
| 305.000 | | | .6362 | .4018 | .2662 | .2930 | | .1647 | | .0755 | | | | | |
| 320.000 | | | .7579 | .4146 | .1323 | .3262 | | .0781 | | -.0956 | .0968 | -.1088 | -.0710 | -.0485 | -.0411 |
| 340.000 | | | .7892 | .3666 | .1304 | .1818 | | -.0310 | | .0968 | | | | | |

| X/LB | .0520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1202 | .2264 | .3381 | .3117 | -.1650 | -.1274 | -.1247 | | -.0901 | -.0989 |
| 40.000 | -.0519 | .1882 | .2933 | .0754 | -.2000 | -.0999 | -.1788 | | -.0940 | -.1191 |
| 70.000 | -.0502 | -.0907 | -.1006 | .0115 | .0000 | -.0394 | -.0731 | | | |
| 90.000 | -.0427 | -.0519 | -.0783 | .0459 | -.0292 | -.0446 | -.0617 | | | |
| 105.000 | | | -.0206 | .0767 | -.0502 | -.0986 | -.1152 | | | |
| 110.000 | | | | | | | | -.1475 | | |
| 120.000 | -.0522 | -.0295 | .1183 | .1219 | .1088 | -.0238 | -.0995 | -.1481 | | |
| 135.000 | | | .1128 | .1593 | .1199 | .0006 | -.0313 | | | |
| 150.000 | -.0646 | -.0521 | .0243 | .1962 | .0512 | .0705 | .0591 | | | |
| 165.000 | -.0656 | | -.0282 | | .2655 | .1383 | -.1282 | | | |
| 180.000 | -.0656 | -.0599 | -.0105 | .2665 | | | | | | |
| 320.000 | .0193 | .2042 | .4323 | .1299 | -.1401 | -.1341 | -.1752 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) GRB. FUSELAGE (RETB44)

ALPHAO( 6) = 3.466 BETAO ( 1) = -4.234

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0480 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3174 | .9942 | .7289 | .4057 | .1470 | .3045 | | .0267 | | -.0246 | .1076 | -.0716 | -.0429 | -.0682 | .0028 |
| 20.000 | | | .7659 | .5096 | .2017 | .3058 | | -.1092 | | .0457 | | | | | |
| 40.000 | | | .8138 | .6387 | .4586 | .1880 | | .1887 | | -.0521 | .0164 | -.0995 | .0652 | .0245 | .0018 |
| 55.000 | | | .7736 | .6432 | .5695 | .3118 | | .2609 | | .1243 | | | | | |
| 70.000 | | | .7116 | .5721 | .5211 | .3461 | | .2121 | | .1541 | -.0480 | -.0503 | -.0573 | -.0320 | |
| 90.000 | | .7905 | .6628 | .5192 | .4634 | .3570 | | .2400 | | .0000 | .0037 | -.0381 | -.0779 | -.0551 | |
| 120.000 | | | .5989 | .4528 | .3599 | .3291 | | .3301 | | .3084 | .0429 | -.1250 | -.1500 | -.1298 | |
| 140.000 | | | | | | | | | | .2939 | | | | | |
| 150.000 | | | .5002 | .3452 | .3016 | .2823 | | | | .1455 | -.1700 | -.1635 | -.1362 | -.0921 | |
| 151.000 | | | | | | | | | .8062 | | | | | | |
| 156.000 | | | | | | | | .8654 | | | | | | | |
| 162.000 | | | | | | | | | .8961 | | | | | | |
| 165.000 | | | | | | | | | | -.0092 | -.1603 | -.1581 | -.1163 | -.0889 | |
| 169.000 | | | | | | | | .3469 | | | | | | | |
| 174.000 | | | | | | | .7606 | | | | | | | | |
| 180.000 | 1.3174 | .6861 | .3897 | .3010 | .2648 | .2450 | | .3258 | | -.0917 | -.1884 | -.1247 | -.0920 | -.0879 | |
| 305.000 | | | .4897 | .3035 | .1935 | .1249 | | .3599 | | -.0283 | | | | | |
| 320.000 | | | .6368 | .3724 | .1304 | .2101 | | -.1348 | | -.0577 | .0109 | -.1385 | -.1520 | -.0237 | .0424 |
| 340.000 | | | .7194 | .3558 | .1508 | .1741 | | -.2031 | | -.0833 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0860 | .3103 | .5414 | .4923 | -.1125 | -.2108 | -.1181 | | -.0251 | -.0939 |
| 40.000 | .1359 | .1755 | .3658 | .0116 | -.1725 | -.1164 | -.1628 | | -.1867 | -.1277 |
| 70.000 | -.0424 | -.1013 | -.1112 | -.1138 | .0000 | -.0420 | -.0678 | | | |
| 90.000 | -.0408 | -.0617 | -.0938 | -.0409 | .0118 | -.0305 | -.0730 | | | |
| 105.000 | | | -.0849 | .0973 | .0390 | -.0662 | -.1070 | | | |
| 110.000 | | | | | | | | -.1501 | | |
| 120.000 | -.1020 | -.0994 | -.0636 | .0973 | .0940 | -.0289 | -.0769 | -.1338 | | |
| 135.000 | | | .0944 | .0914 | .0423 | -.0455 | -.0857 | | | |
| 150.000 | -.0738 | -.0711 | .0996 | .0829 | -.0987 | -.0442 | .0228 | | | |
| 165.000 | -.0741 | | .0963 | | .1757 | .1404 | -.1024 | | | |
| 180.000 | -.0787 | -.0780 | .0999 | .0999 | | | | | | |
| 320.000 | .0096 | .2303 | .5854 | .3637 | -.1003 | -.1240 | -.1671 | | | |

ARC97-019 IA81 LVAP(ALLM. SEALED) ORB. FUSELAGE (RETB44)

ALPHAO( 6) = 3.478 BETAO ( 2) = .019

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3404 | 1.1322 | .7911 | .3612 | .0951 | .1515 | | -.0020 | | .0934 | .1225 | -.0843 | -.1279 | .0139 | .0234 |
| 20.000 | | | .7806 | .4157 | .0951 | .1508 | | -.0465 | | .0656 | | | | | |
| 40.000 | | | .7787 | .4878 | .1735 | .2227 | | .1001 | | -.1132 | -.0073 | -.0733 | -.0644 | .0318 | .0351 |
| 55.000 | | | .6349 | .4786 | .3234 | .2295 | | .1815 | | .0672 | | | | | |
| 70.000 | | | .5755 | .4071 | .3131 | .2493 | | .1619 | | .0915 | -.0746 | -.0946 | -.1055 | -.0974 | |
| 90.000 | | .8410 | .5522 | .3904 | .2977 | .2551 | | .1824 | | .0000 | -.0406 | -.0801 | -.1266 | -.1074 | |
| 120.000 | | | .5079 | .3728 | .2680 | .2350 | | .3802 | | .2244 | -.0076 | -.1677 | -.1590 | -.1128 | |
| 140.000 | | | | | | | | | | .2088 | | | | | |
| 150.000 | | | .4481 | .3311 | .2774 | .2353 | | | | .0717 | -.1639 | -.1539 | -.1077 | -.0886 | |
| 151.000 | | | | | | | | | .6776 | | | | | | |
| 156.000 | | | | | | | | .7153 | | | | | | | |
| 162.000 | | | | | | | | | .8361 | | | | | | |
| 165.000 | | | | | | | | | | -.0053 | -.1761 | -.1154 | -.0875 | -.0814 | |
| 169.000 | | | | | | | | .9006 | | | | | | | |
| 174.000 | | | | | | | .7011 | | | | | | | | |
| 180.000 | 1.3404 | .8498 | .3913 | .3218 | .2823 | .2399 | | .9450 | | -.1089 | -.1648 | -.0329 | -.0788 | -.0797 | |
| 305.000 | | | .6187 | .3801 | .2907 | .2997 | | .1549 | | .0545 | | | | | |
| 320.000 | | | .7889 | .3798 | .1330 | .2881 | | .0646 | | -.1092 | .0581 | -.1202 | -.0615 | -.0346 | -.0139 |
| 340.000 | | | .726: | .3224 | .0666 | .2373 | | -.0869 | | .0639 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1781 | .2688 | .3746 | .3382 | -.1448 | -.1179 | -.1312 | | -.0948 | -.1020 |
| 40.000 | -.0342 | .2154 | .3408 | .1204 | -.1832 | -.1163 | -.1874 | | -.1183 | -.1330 |
| 70.000 | -.0689 | -.1121 | -.1274 | -.0421 | .0000 | -.0569 | -.0808 | | | |
| 90.000 | -.0529 | -.0643 | -.0992 | .0554 | -.0186 | -.0733 | -.1021 | | | |
| 105.000 | | | .0029 | .0856 | -.0350 | -.0966 | -.1253 | | | |
| 110.000 | | | | | | | | -.1635 | | |
| 120.000 | -.0804 | -.0457 | .0908 | .0805 | .0654 | -.0423 | -.1024 | -.1455 | | |
| 135.000 | | | .0815 | .1349 | .0851 | -.0109 | -.0351 | | | |
| 150.000 | -.0732 | -.0572 | .0583 | .1804 | .0654 | .0580 | .0293 | | | |
| 185.000 | -.0784 | | -.0338 | | .2441 | .1149 | -.1230 | | | |
| 180.000 | -.0850 | -.0834 | -.3375 | .2569 | | | | | | |
| 320.000 | .0247 | .2877 | .4476 | .1900 | -.1398 | -.1168 | -.1685 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB44)

ALPHAO( 6) = 3.485 BETAO ( 3) = 3.581

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2693 | .9990 | .7418 | .3827 | .0954 | .3098 | | -.0243 | | -.0228 | .0369 | -.1067 | -.1713 | -.0376 | -.0614 |
| 20.000 | | | .6955 | .3410 | .1112 | .1285 | | -.0235 | | -.1392 | | | | | |
| 40.000 | | | .5872 | .3600 | .1148 | .1822 | | -.0135 | | -.1244 | .0094 | -.0783 | -.1165 | -.0132 | .0005 |
| 55.000 | | | .4683 | .3186 | .1738 | .1146 | | .0884 | | -.0187 | | | | | |
| 70.000 | | | .4316 | .2875 | .1883 | .0479 | | .1368 | | .0397 | -.1158 | -.1365 | -.1283 | -.1492 | |
| 90.000 | | .4603 | .4102 | .2764 | .1861 | .0951 | | .1474 | | .0000 | -.0779 | -.1328 | -.1566 | -.1405 | |
| 120.000 | | | .3734 | .2790 | .1842 | .1550 | | .2522 | | .1756 | -.0547 | -.2059 | -.1550 | -.1239 | |
| 140.000 | | | | | | | | | | .0213 | | | | | |
| 150.000 | | | .3485 | .2777 | .2334 | .1851 | | | | -.0220 | -.2005 | -.1277 | -.1033 | -.0948 | |
| 151.000 | | | | | | | | | .5491 | | | | | | |
| 156.000 | | | | | | | | .7058 | | | | | | | |
| 162.000 | | | | | | | | | .7576 | | | | | | |
| 165.000 | | | | | | | | | | -.0702 | -.1872 | -.1216 | -.0896 | -.0902 | |
| 169.000 | | | | | | | | .9246 | | | | | | | |
| 174.000 | | | | | | | .7782 | | | | | | | | |
| 180.000 | 1.2693 | .6271 | .3664 | .2974 | .2654 | .2366 | | .9349 | | -.1125 | -.1927 | -.1271 | -.1001 | -.0925 | |
| 305.000 | | | .7543 | .6114 | .5071 | .3554 | | .2205 | | .1135 | | | | | |
| 320.000 | | | .8189 | .6255 | .3422 | .2133 | | .1503 | | -.0459 | .0239 | -.1174 | -.0588 | -.0211 | -.0149 |
| 340.000 | | | .8007 | .4809 | .1149 | .3886 | | -.1341 | | .0401 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0122 | .2325 | .3939 | .3637 | -.1447 | -.1496 | -.1393 | | -.1006 | -.1055 |
| 40.000 | -.0316 | .1356 | .5177 | .1844 | -.1624 | -.1139 | -.1576 | | -.0924 | -.1071 |
| 70.000 | -.0565 | -.1039 | -.1127 | -.0181 | .0000 | -.0720 | -.1027 | | | |
| 90.000 | -.0483 | -.0686 | -.0969 | .0245 | -.0530 | -.0703 | -.0877 | | | |
| 105.000 | | | -.0565 | .0528 | -.1074 | -.1408 | -.1491 | | | |
| 110.000 | | | | | | | | -.1763 | | |
| 120.000 | -.0817 | -.0378 | .0715 | .0718 | .0594 | -.0805 | -.1531 | -.1883 | | |
| 135.000 | | | .1056 | .1131 | .0456 | -.0570 | -.0782 | | | |
| 150.000 | -.0918 | -.0831 | .0954 | .0751 | .0243 | -.0335 | -.0570 | | | |
| 165.000 | -.0902 | | .0974 | | .0456 | -.0024 | -.1575 | | | |
| 180.000 | -.0846 | -.0759 | .0984 | .0882 | | | | | | |
| 320.000 | .0453 | .2467 | .3470 | .0247 | -.1577 | -.1171 | -.1609 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB44)

ALPHAO( 7) = 6.187 BETAO ( 1) = .048

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3458 | 1.2401 | .8160 | .2483 | .0306 | .2473 | | .0121 | | .0862 | .1025 | -.0983 | -.1316 | .0638 | .1491 |
| 20.000 | | | .8339 | .3006 | -.0098 | .1871 | | -.0786 | | .0676 | | | | | |
| 40.000 | | | .8288 | .4287 | .1775 | .1829 | | .0865 | | -.1257 | -.0310 | -.1057 | -.0659 | .0517 | .1246 |
| 55.000 | | | .7157 | .4614 | .3208 | .2053 | | .1612 | | .0452 | | | | | |
| 70.000 | | | .5564 | .3961 | .3227 | .2282 | | .1365 | | .0740 | -.0996 | -.1161 | -.1233 | -.0893 | |
| 90.000 | | .6203 | .5446 | .3775 | .2897 | .2337 | | .1554 | | .0000 | -.0504 | -.0893 | -.1406 | -.1099 | |
| 120.000 | | | .4887 | .3480 | .2396 | .2176 | | .3221 | | .1979 | -.0252 | -.1688 | -.1759 | -.1323 | |
| 140.000 | | | | | | | | | | .1837 | | | | | |
| 150.000 | | | .4117 | .2920 | .2350 | .2163 | | | | .0563 | -.1782 | -.1688 | -.1214 | -.1075 | |
| 151.000 | | | | | | | | | .6284 | | | | | | |
| 156.000 | | | | | | | | .6853 | | | | | | | |
| 162.000 | | | | | | | | | .7634 | | | | | | |
| 165.000 | | | | | | | | | | -.0226 | -.1859 | -.1284 | -.1057 | -.0993 | |
| 169.000 | | | | | | | | .8296 | | | | | | | |
| 174.000 | | | | | | | .6468 | | | | | | | | |
| 180.000 | 1.3458 | .5918 | .3469 | .2839 | .2418 | .2179 | | .8571 | | -.1183 | -.1775 | -.1047 | -.0983 | -.0964 | |
| 305.000 | | | .6458 | .3695 | .2904 | .2638 | | .1375 | | .0372 | | | | | |
| 320.000 | | | .8233 | .3388 | .1506 | .2373 | | .0599 | | -.1222 | .0204 | -.1329 | -.0688 | -.0156 | .0341 |
| 340.000 | | | .8467 | .2370 | -.0125 | .3176 | | -.1369 | | .0569 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1799 | .3096 | .4026 | .3558 | -.1430 | -.1044 | -.1590 | | -.0880 | -.0955 |
| 40.000 | .0053 | .2662 | .4095 | .1740 | -.1806 | -.1440 | -.1855 | | -.1186 | -.1268 |
| 70.000 | -.0771 | -.1233 | -.1392 | -.1228 | .0000 | -.0693 | -.0924 | | | |
| 90.000 | -.0610 | -.0774 | -.1116 | .0254 | -.0175 | -.0621 | -.1032 | | | |
| 105.000 | | | -.0696 | .0713 | -.0130 | -.1050 | -.1401 | | | |
| 110.000 | | | | | | | | -.1747 | | |
| 120.000 | -.0751 | -.0605 | .0505 | .0848 | .0370 | -.0709 | -.1029 | -.1434 | | |
| 135.000 | | | .0582 | .0999 | .0328 | -.0091 | -.0304 | | | |
| 150.000 | -.0784 | -.0598 | .0592 | .1287 | .0675 | .0359 | -.0016 | | | |
| 165.000 | -.0816 | | .0402 | | .2129 | .0895 | -.1189 | | | |
| 180.000 | -.0931 | -.0608 | .0218 | .2570 | | | | | | |
| 320.000 | .0249 | .3427 | .4809 | .2675 | -.1292 | -.1345 | -.1757 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB45) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.200 RN/FT = 2.500
ELV-IB = 8.000 ELV-OB = .000
RUDDER = .000 SPDBRK = .000

ALPHAO( 1) = -6.332 BETAO ( 1) = -.120

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.6316 | .8591 | .2566 | .2129 | .6270 | .5125 | | .0708 | | .0206 | .2585 | -.0088 | .0030 | .0126 | .0848 |
| 20.000 | | | .3028 | .2182 | .6042 | .5125 | | .0844 | | .0570 | | | | | |
| 40.000 | | | .4378 | .1881 | .2550 | .3726 | | .2103 | | -.0204 | .0959 | .0192 | .0345 | .0851 | .0301 |
| 55.000 | | | 5367 | .2597 | .2476 | .3335 | | .3584 | | .2163 | | | | | |
| 70.000 | | | .5887 | .3362 | .2236 | .2214 | | .3875 | | .2903 | .0602 | .0279 | .0292 | -.0072 | |
| 90.000 | | .8176 | .6342 | .4060 | .2697 | .2053 | | .3217 | | .0000 | .1040 | .0325 | -.0122 | .0010 | |
| 120.000 | | | .6928 | .5215 | .3865 | .3389 | | .4326 | | .2812 | .0739 | -.0760 | -.0035 | .0196 | |
| 140.000 | | | | | | | | | | .2204 | | | | | |
| 150.000 | | | .6918 | .5473 | .4779 | .4218 | | | | .1694 | -.0702 | -.0350 | .0130 | .0433 | |
| 151.000 | | | | | | | | | .9523 | | | | | | |
| 156.000 | | | | | | | | 1.0957 | | | | | | | |
| 162.000 | | | | | | | | | 1.1630 | | | | | | |
| 165.000 | | | | | | | | | | .1357 | -.0769 | -.0023 | .0262 | .0521 | |
| 169.000 | | | | | | | | 1.3796 | | | | | | | |
| 174.000 | | | | | | | 1.1172 | | | | | | | | |
| 180.000 | 1.6316 | 1.0107 | .6519 | .5483 | .4931 | .4548 | | 1.3957 | | .0098 | -.0616 | -.0168 | .0225 | .0554 | |
| 305.000 | | | .4932 | .2062 | .2604 | .2821 | | .3002 | | .1744 | | | | | |
| 320.000 | | | .3709 | .1988 | .4799 | .3229 | | .1654 | | .0102 | .1971 | .0143 | -.0175 | .0298 | .0069 |
| 340.000 | | | .3078 | .2055 | .5845 | .4881 | | .0781 | | .0936 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0450 | .1229 | .4347 | .4003 | -.1382 | -.2238 | -.1435 | | -.0873 | -.0994 |
| 40.000 | -.0380 | .1003 | .3199 | -.0499 | -.2011 | -.1399 | -.1556 | | -.1256 | -.1112 |
| 70.000 | .0490 | -.0029 | -.0130 | .0963 | .0000 | .0470 | .0133 | | | |
| 90.000 | .0524 | .0413 | .0032 | .1545 | .0639 | .0382 | .0190 | | | |
| 105.000 | | | .0286 | .1826 | .0256 | -.0261 | -.0467 | | | |
| 110.000 | | | | | | | | -.0835 | | |
| 120.000 | .0156 | .0540 | .0953 | .2162 | .1857 | .0396 | -.0339 | -.0963 | | |
| 135.000 | | | .1210 | .3059 | .1905 | .0770 | .0564 | | | |
| 150.000 | .0379 | .0327 | .0540 | .3042 | .2074 | .1839 | .1548 | | | |
| 165.000 | .0409 | | .0306 | | .3995 | .2769 | -.0686 | | | |
| 180.000 | .0409 | .0351 | .0310 | .3912 | | | | | | |
| 320.000 | .0301 | .1938 | .3214 | .1197 | -.1240 | -.1303 | -.1792 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB45)

ALPHAO( 2) = -4.288 BETAO ( 1) = -4.351

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1860 | .1770 | .2040 | .2510 | .3010 | .3780 | .4870 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.6034 | .8254 | .2301 | .3425 | .4374 | .4743 | | .0463 | | .0920 | .1128 | .0460 | .0654 | -.0478 | .0399 |
| 20.000 | | | .3120 | .3161 | .5647 | .4848 | | -.0306 | | .1379 | | | | | |
| 40.000 | | | .5149 | .3445 | .7237 | .3275 | | .2919 | | .0365 | .1242 | .0010 | .0475 | .1445 | .0075 |
| 55.000 | | | .6352 | .3442 | .4526 | .4766 | | .3887 | | .2496 | | | | | |
| 70.000 | | | .6922 | .4232 | .3785 | .5334 | | .3752 | | .2890 | .0621 | .0627 | .0495 | -.0055 | |
| 90.000 | | .9133 | .7334 | .4919 | .3585 | .3901 | | .4243 | | .0000 | .1148 | .0604 | .0134 | -.0018 | |
| 120.000 | | | .7608 | .5825 | .4389 | .3897 | | .5727 | | .4593 | .1636 | -.0455 | -.0280 | -.0055 | |
| 140.000 | | | | | | | | | | .4194 | | | | | |
| 150.000 | | | .7047 | .5346 | .4660 | .4105 | | | | .2427 | -.0494 | -.0309 | -.0207 | .0011 | |
| 151.000 | | | | | | | | | 1.0010 | | | | | | |
| 156.000 | | | | | | | | 1.0419 | | | | | | | |
| 162.000 | | | | | | | | | 1.1629 | | | | | | |
| 165.000 | | | | | | | | | | .1235 | -.0615 | -.0346 | -.0144 | -.0026 | |
| 169.000 | | | | | | | | 1.2539 | | | | | | | |
| 174.000 | | | | | | | 1.0006 | | | | | | | | |
| 180.000 | 1.6034 | .9529 | .5983 | .4880 | .4356 | .3960 | | 1.2426 | | -.0040 | -.0922 | -.0124 | -.0111 | -.0114 | |
| 305.000 | | | .3565 | .1865 | .2727 | .1488 | | .1548 | | .0724 | | | | | |
| 320.000 | | | .2764 | .2059 | .4459 | .2921 | | .0384 | | .0263 | .1041 | -.0438 | -.0664 | -.0552 | -.0374 |
| 340.000 | | | .2540 | .2967 | .4257 | .3652 | | .0411 | | -.0097 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0645 | .1826 | .4269 | .2970 | -.1458 | -.2232 | -.1981 | | -.1017 | -.0916 |
| 40.000 | -.0709 | .0649 | .2087 | -.0550 | -.1911 | -.1468 | -.1526 | | -.2278 | -.1787 |
| 70.000 | .0358 | -.0159 | -.0181 | .0343 | .0000 | .0604 | .0304 | | | |
| 90.000 | .0396 | .0342 | .0028 | .1528 | .0922 | .0625 | .0304 | | | |
| 105.000 | | | .0167 | .2053 | .0936 | .0057 | -.0262 | | | |
| 110.000 | | | | | | | | -.0690 | | |
| 120.000 | -.0019 | .0350 | .0391 | .2457 | .2254 | .0752 | -.0060 | -.0757 | | |
| 135.000 | | | .2009 | .2660 | .2156 | .0712 | .0230 | | | |
| 150.000 | -.0029 | .0039 | .2073 | .2322 | .0527 | .1645 | .1892 | | | |
| 165.000 | -.0023 | | .1609 | | .4100 | .3472 | -.0198 | | | |
| 180.000 | -.0029 | -.0073 | .0922 | .2119 | | | | | | |
| 320.000 | .0804 | .0482 | .3759 | .1382 | -.0687 | -.1550 | -.1826 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB45)

ALPHAO( 2) = -4.320 BETAO ( 2) = -.149

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1880 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5830 | .8308 | .2361 | .2236 | .6076 | .4411 | | .0600 | | .0007 | .2395 | -.0237 | -.0140 | -.0780 | .0609 |
| 20.000 | | | .2814 | .2246 | .6407 | .4669 | | .0673 | | .0305 | | | | | |
| 40.000 | | | .4132 | .2269 | .4094 | .2657 | | .1994 | | -.0327 | .0890 | -.0046 | .0195 | .0745 | .0196 |
| 55.000 | | | .5044 | .2400 | .2748 | .3344 | | .3302 | | .1885 | | | | | |
| 70.000 | | | .5526 | .3116 | .2152 | .2282 | | .3308 | | .2540 | .0348 | .0118 | .0079 | -.0339 | |
| 90.000 | | .7779 | .5962 | .3759 | .2467 | .2225 | | .2918 | | .0000 | .0877 | .0179 | -.0309 | -.0262 | |
| 120.000 | | | .6431 | .4786 | .3467 | .2992 | | .4076 | | .2933 | .0934 | -.0846 | -.0319 | -.0044 | |
| 140.000 | | | | | | | | | | .2107 | | | | | |
| 150.000 | | | .6322 | .4876 | .4226 | .3709 | | | | .1469 | -.0882 | -.0438 | -.0136 | .0220 | |
| 151.000 | | | | | | | | | .8826 | | | | | | |
| 156.000 | | | | | | | | .9982 | | | | | | | |
| 162.000 | | | | | | | | | 1.1056 | | | | | | |
| 165.000 | | | | | | | | | | .1074 | -.0969 | -.0286 | .0023 | .0277 | |
| 169.000 | | | | | | | | 1.2896 | | | | | | | |
| 174.000 | | | | | | | 1.0451 | | | | | | | | |
| 180.000 | 1.5830 | .9444 | .5870 | .4859 | .4348 | .3947 | | 1.3065 | | -.0110 | -.0872 | -.0421 | .0116 | .0308 | |
| 305.000 | | | .4697 | .1901 | .3122 | .2439 | | .2725 | | .1562 | | | | | |
| 320.000 | | | .3525 | .2216 | .5272 | .2858 | | .1457 | | .0051 | .1800 | -.0153 | -.0329 | .0210 | -.0044 |
| 340.000 | | | .2878 | .2189 | .5822 | .3918 | | .0550 | | .0693 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0085 | .1841 | .4003 | .3722 | -.1420 | -.2213 | -.1384 | | -.0886 | -.1041 |
| 40.000 | -.0460 | .1272 | .2819 | -.0427 | -.2010 | -.1257 | -.1553 | | -.1247 | -.1166 |
| 70.000 | .0189 | -.0289 | -.0406 | .0740 | .0000 | .0193 | -.0115 | | | |
| 90.000 | .0213 | .0152 | -.0203 | .1218 | .0420 | .0143 | -.0054 | | | |
| 105.000 | | | .0130 | .1524 | .0105 | -.0420 | -.0640 | | | |
| 110.000 | | | | | | | | -.1009 | | |
| 120.000 | -.0071 | .0289 | .0788 | .1854 | .1668 | .0267 | -.0518 | -.1066 | | |
| 135.000 | | | .1035 | .2681 | .1671 | .0440 | .0335 | | | |
| 150.000 | .0142 | .0106 | .0404 | .2669 | .1735 | .1451 | .1241 | | | |
| 165.000 | .0162 | | .0092 | | .3437 | .2345 | -.0779 | | | |
| 180.000 | .0183 | .0133 | .0103 | .3488 | | | | | | |
| 320.000 | .0200 | .1982 | .3118 | .1329 | -.1261 | -.1364 | -.1905 | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET845)

ALPHAO( 2) = -4.300 BETAO ( 3) = 3.413

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5951 | .8477 | .2341 | .2372 | .4854 | .5022 | | .0184 | | .0912 | .1602 | .0087 | -.0772 | .0105 | -.0760 |
| 20.000 | | | .2434 | .2138 | .4288 | .3602 | | .0304 | | -.0225 | | | | | |
| 40.000 | | | .3217 | .2181 | .4507 | .2899 | | .0985 | | -.0050 | .0621 | .0273 | -.0080 | .0244 | .0114 |
| 55.000 | | | .3812 | .1870 | .1833 | .1518 | | .2518 | | .1173 | | | | | |
| 70.000 | | | .4178 | .2061 | .1693 | .1732 | | .1835 | | .1983 | .0030 | -.0364 | -.0229 | -.0517 | |
| 90.000 | | .6212 | .4580 | .2683 | .1603 | .1401 | | .1484 | | .0000 | .0454 | -.0266 | -.0666 | -.0352 | |
| 120.000 | | | .5183 | .3891 | .2746 | .2261 | | .3187 | | .1959 | -.0227 | -.1360 | -.0404 | -.0318 | |
| 140.000 | | | | | | | | | | .1308 | | | | | |
| 150.000 | | | .5510 | .4588 | .3934 | .3304 | | | | .0965 | -.1109 | -.0507 | -.0246 | .0097 | |
| 151.000 | | | | | | | | | .7222 | | | | | | |
| 156.000 | | | | | | | | .9297 | | | | | | | |
| 162.000 | | | | | | | | | 1.0247 | | | | | | |
| 165.000 | | | | | | | | | | .0601 | -.0935 | -.0414 | .0002 | .0087 | |
| 169.000 | | | | | | | | 1.1771 | | | | | | | |
| 174.000 | | | | | | | .9919 | | | | | | | | |
| 180.000 | 1.5951 | .8981 | .5770 | .4904 | .4427 | .3961 | | 1.2504 | | -.0077 | -.0905 | -.0070 | .0012 | -.0025 | |
| 305.000 | | | .5859 | .3050 | .3818 | .4867 | | .3554 | | .2223 | | | | | |
| 320.000 | | | .4279 | .2693 | .7614 | .2966 | | .2241 | | .0347 | .1702 | .0042 | -.0216 | .0980 | .0208 |
| 340.000 | | | .3140 | .2509 | .6176 | .5062 | | -.0586 | | .1235 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0619 | .1211 | .3329 | .3860 | -.1458 | -.1337 | -.1248 | | -.0923 | -.0983 |
| 40.000 | .0002 | .0829 | .4120 | .0394 | -.1928 | -.1429 | -.1519 | | -.1037 | -.1099 |
| 70.000 | .0056 | -.0460 | -.0544 | .0421 | .0000 | .0011 | -.0287 | | | |
| 90.000 | -.0008 | -.0001 | -.0276 | .1183 | -.0074 | -.0122 | -.0226 | | | |
| 105.000 | | | .0655 | .0661 | -.0379 | -.0758 | -.0922 | | | |
| 110.000 | | | | | | | | -.1212 | | |
| 120.000 | -.0524 | -.0263 | .0895 | .0888 | .0871 | -.0361 | -.0895 | -.1455 | | |
| 135.000 | | | .0008 | .2090 | .0959 | .0125 | -.0162 | | | |
| 150.000 | -.0143 | -.0171 | -.0171 | .2394 | .1311 | .0422 | .0341 | | | |
| 165.000 | -.0096 | | -.0043 | | .2337 | .1371 | -.1249 | | | |
| 180.000 | .0046 | -.0063 | .0689 | .2442 | | | | | | |
| 320.000 | .0093 | .1443 | .3535 | -.0883 | -.1638 | -.1435 | -.1498 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB45)

ALPHAO( 3) = -2.199 BETAO ( 1) = -.165

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0480 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5072 | .8046 | .2190 | .5090 | .5322 | .3581 | | .0514 | | -.0201 | .2189 | -.0333 | -.0330 | -.1072 | .0512 |
| 20.000 | | | .2633 | .3156 | .5412 | .3765 | | .0560 | | .0126 | | | | | |
| 40.000 | | | .3891 | .2728 | .5908 | .2187 | | .1884 | | -.0400 | .0752 | -.0183 | .0101 | .0568 | .0096 |
| 55.000 | | | .4743 | .2487 | .3340 | .2862 | | .2937 | | .1633 | | | | | |
| 70.000 | | | .5136 | .2848 | .2544 | .3200 | | .2841 | | .2182 | .0131 | -.0056 | -.0141 | -.0545 | |
| 90.000 | | .7278 | .5503 | .3434 | .2229 | .2314 | | .3080 | | .0000 | .0536 | .0018 | -.0459 | -.0505 | |
| 120.000 | | | .5896 | .4345 | .3143 | .2611 | | .3792 | | .3404 | .0849 | -.0953 | -.0582 | -.0260 | |
| 140.000 | | | | | | | | | | .2115 | | | | | |
| 150.000 | | | .5750 | .4371 | .3775 | .3237 | | | | .1273 | -.0981 | -.0592 | -.0345 | .0005 | |
| 151.000 | | | | | | | | | .8168 | | | | | | |
| 158.000 | | | | | | | | .9040 | | | | | | | |
| 162.000 | | | | | | | | | 1.0500 | | | | | | |
| 165.000 | | | | | | | | | | .0786 | -.1135 | -.0396 | -.0151 | .0059 | |
| 169.000 | | | | | | | | 1.2056 | | | | | | | |
| 174.000 | | | | | | | .9531 | | | | | | | | |
| 180.000 | 1.5072 | .8723 | .5311 | .4275 | .3851 | .3467 | | 1.2155 | | -.0280 | -.1071 | -.0598 | -.0005 | .0093 | |
| 305.000 | | | .4432 | .3257 | .3963 | .1886 | | .2500 | | .1347 | | | | | |
| 320.000 | | | .3323 | .3997 | .5362 | .2049 | | .1275 | | -.0185 | .1648 | -.0370 | -.0459 | .0045 | -.0100 |
| 340.000 | | | .2694 | .3901 | .5607 | .2996 | | .0408 | | .0542 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0070 | .2250 | .3738 | .2996 | -.1365 | -.2069 | -.1283 | | -.0806 | -.1022 |
| 40.000 | -.0445 | .1442 | .2604 | -.0218 | -.1930 | -.0993 | -.1533 | | -.1035 | -.1113 |
| 70.000 | -.0070 | -.0475 | -.0614 | .0504 | .0000 | -.0008 | -.0277 | | | |
| 90.000 | -.0053 | -.0056 | -.0417 | .0920 | .0276 | -.0032 | -.0230 | | | |
| 105.000 | | | -.0041 | .1367 | -.0005 | -.0499 | -.0733 | | | |
| 110.000 | | | | | | | | -.1114 | | |
| 120.000 | -.0259 | .0064 | .0788 | .1589 | .1630 | .0162 | -.0588 | -.1125 | | |
| 135.000 | | | .0737 | .2310 | .1437 | .0287 | .0084 | | | |
| 150.000 | -.0066 | -.0099 | .0141 | .2300 | .1200 | .1057 | .1047 | | | |
| 165.000 | -.0036 | | -.0113 | | .3014 | .2006 | -.0881 | | | |
| 180.000 | -.0029 | -.0065 | -.0102 | .3139 | | | | | | |
| 320.000 | .0235 | .1977 | .3484 | .1356 | -.1220 | -.1347 | -.1945 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET845)

ALPHAO( 4) = -.116 BETAO ( 1) = -6.442

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4115 | .7790 | .3077 | .6015 | .3242 | .3543 | | .0626 | | .0767 | .0092 | .0476 | -.0031 | -.0262 | .0395 |
| 20.000 | | | .2947 | .6806 | .5329 | .3325 | | -.0198 | | .1435 | | | | | |
| 40.000 | | | .5212 | .6495 | .7584 | .3272 | | .3029 | | .0499 | .0503 | -.0342 | .0072 | .1141 | .0010 |
| 55.000 | | | .6586 | .5319 | .7805 | .4868 | | .2933 | | .2374 | | | | | |
| 70.000 | | | .6985 | .4591 | .5849 | .5152 | | .3307 | | .2414 | .0446 | .0406 | .0317 | -.0097 | |
| 90.000 | | .9008 | .7203 | .4975 | .4469 | .5136 | | .3777 | | .0000 | .0797 | .0482 | .0148 | -.0195 | |
| 120.000 | | | .7015 | .5346 | .3866 | .3978 | | .4110 | | .4302 | .1422 | -.0498 | -.0683 | -.0696 | |
| 140.000 | | | | | | | | | | .4226 | | | | | |
| 150.000 | | | .6048 | .4306 | .3643 | .3312 | | | | .2581 | -.1051 | -.0964 | -.0786 | -.0676 | |
| 151.000 | | | | | | | | | .9742 | | | | | | |
| 156.000 | | | | | | | | 1.0101 | | | | | | | |
| 162.000 | | | | | | | | | 1.0824 | | | | | | |
| 165.000 | | | | | | | | | | .0663 | -.0887 | -.0908 | -.0911 | -.0659 | |
| 169.000 | | | | | | | | 1.0708 | | | | | | | |
| 174.000 | | | | | | | .8308 | | | | | | | | |
| 180.000 | 1.4115 | .7932 | .4684 | .3810 | .3135 | .2850 | | .9860 | | -.0108 | -.1371 | -.0978 | -.0762 | -.0693 | |
| 305.000 | | | .2317 | .2634 | .2285 | .0720 | | .0255 | | .0159 | | | | | |
| 320.000 | | | .2573 | .3989 | .2650 | .2148 | | -.0427 | | -.0596 | .0242 | -.0898 | -.1342 | -.0799 | -.0781 |
| 340.000 | | | .3055 | .5098 | .2503 | .2636 | | .0093 | | -.0118 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0216 | .2578 | .4546 | .3116 | -.1275 | -.2237 | -.1772 | | -.0879 | -.0859 |
| 40.000 | -.0517 | .0963 | .1987 | -.1187 | -.1631 | -.0842 | -.1336 | | -.1816 | -.1772 |
| 70.000 | .0108 | -.0389 | -.0475 | -.0475 | .0000 | .0394 | .0123 | | | |
| 90.000 | .0111 | -.0004 | -.0305 | .0058 | .0794 | .0479 | .0055 | | | |
| 105.000 | | | -.0271 | .1607 | .1187 | .0133 | -.0293 | | | |
| 110.000 | | | | | | | | -.0779 | | |
| 120.000 | -.0632 | -.0522 | -.0607 | .1475 | .1508 | .0535 | -.0009 | -.0644 | | |
| 135.000 | | | .0943 | .1332 | .1359 | .0234 | -.0097 | | | |
| 150.000 | -.0676 | -.0559 | .1285 | .0889 | -.0571 | .0190 | .0200 | | | |
| 165.000 | -.0690 | | .1194 | | .3121 | .2997 | -.0256 | | | |
| 180.000 | -.0713 | -.0658 | .0946 | .0577 | | | | | | |
| 320.000 | .1064 | .0407 | .4471 | .1718 | -.0551 | -.1306 | -.1401 | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET845)

ALPHAO( 4) = -.115 BETAO ( 2) = -4.378

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4535 | .7830 | .3717 | .5846 | .2453 | .3533 | | .0461 | | .0498 | .0941 | .0122 | .0231 | -.0908 | .0098 |
| 20.000 | | | .3721 | .6406 | .3853 | .3657 | | -.0425 | | .1104 | | | | | |
| 40.000 | | | .4895 | .6323 | .5800 | .2768 | | .2669 | | .0223 | .0707 | -.0446 | .0059 | .0893 | -.0159 |
| 55.000 | | | .5871 | .4886 | .5972 | .4227 | | .2844 | | .2050 | | | | | |
| 70.000 | | | .6280 | .4145 | .4568 | .4594 | | .3013 | | .2162 | .0169 | .0166 | .0102 | -.0401 | |
| 90.000 | | .8137 | .6494 | .4363 | .3537 | .4501 | | .3410 | | .0000 | .0617 | .0291 | -.0173 | -.0458 | |
| 120.000 | | | .6524 | .4895 | .3540 | .3671 | | .4246 | | .3957 | .1242 | -.0670 | -.0905 | -.0703 | |
| 140.000 | | | | | | | | | | .3844 | | | | | |
| 150.000 | | | .5815 | .4237 | .3604 | .3149 | | | | .2117 | -.0997 | -.0835 | -.0825 | -.0493 | |
| 151.000 | | | | | | | | | .9045 | | | | | | |
| 156.000 | | | | | | | | .9389 | | | | | | | |
| 162.000 | | | | | | | | | 1.0297 | | | | | | |
| 165.000 | | | | | | | | | | .0764 | -.0957 | -.0865 | -.0699 | -.0486 | |
| 169.000 | | | | | | | | 1.0333 | | | | | | | |
| 174.000 | | | | | | | .8128 | | | | | | | | |
| 180.000 | 1.4535 | .7965 | .4730 | .3737 | .3266 | .2935 | | 1.0373 | | -.0349 | -.1361 | -.0653 | -.0550 | -.0506 | |
| 305.000 | | | .2998 | .2995 | .2811 | .0999 | | .1067 | | .0316 | | | | | |
| 320.000 | | | .3326 | .4343 | .3095 | .2229 | | .0204 | | -.0001 | .0664 | -.0742 | -.1140 | -.0947 | -.0611 |
| 340.000 | | | .3627 | .5264 | .2356 | .2360 | | .0409 | | -.0365 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0409 | .1850 | .4599 | .3074 | -.1268 | -.2245 | -.1619 | | -.0598 | -.0826 |
| 40.000 | -.0162 | .1040 | .2610 | -.0570 | -.1674 | -.1261 | -.1123 | | -.1752 | -.1658 |
| 70.000 | -.0101 | -.0587 | -.0600 | -.0424 | .0000 | .0139 | -.0057 | | | |
| 90.000 | -.0067 | -.0169 | -.0356 | .0954 | .0514 | .0165 | -.0115 | | | |
| 105.000 | | | -.0329 | .1459 | .0728 | -.0209 | -.0459 | | | |
| 110.000 | | | | | | | | -.0900 | | |
| 120.000 | -.0520 | -.0245 | -.0041 | .1607 | .1647 | .0368 | -.0270 | -.0870 | | |
| 135.000 | | | .1509 | .1637 | .1576 | .0250 | -.0182 | | | |
| 150.000 | -.0476 | -.0319 | .1625 | .1417 | -.0135 | .0526 | .1032 | | | |
| 165.000 | -.0469 | | .1428 | | .2960 | .2665 | -.0374 | | | |
| 180.000 | -.0456 | -.0465 | .1106 | .1279 | | | | | | |
| 320.000 | .0699 | .0507 | .4052 | .1867 | -.0705 | -.1373 | -.1710 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET845)

ALPHAO( 4) = -.112 BETAO ( 3) = -2.264

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4430 | .7705 | .4285 | .5768 | .2399 | .3293 | | .0362 | | -.0072 | .1955 | -.0326 | -.0227 | -.1097 | -.0381 |
| 20.000 | | | .3988 | .6055 | .2993 | .3521 | | -.0317 | | .0599 | | | | | |
| 40.000 | | | .4467 | .5883 | .4637 | 2518 | | .2269 | | -.0092 | .0642 | -.0503 | -.0005 | .0716 | -.0368 |
| 55.000 | | | .5238 | .4488 | .4931 | .3708 | | .2739 | | .1743 | | | | | |
| 70.000 | | | .5539 | .3711 | .3784 | .3913 | | .2617 | | .1958 | .0084 | -.0073 | -.0151 | -.0618 | |
| 90.000 | | .7577 | .5793 | .3794 | .3083 | .3106 | | .3172 | | .0000 | .0432 | .0058 | -.0409 | -.0667 | |
| 120.000 | | | .5987 | .4495 | .3175 | .2895 | | .4451 | | .3501 | .0933 | -.0872 | -.0826 | -.0644 | |
| 140.000 | | | | | | | | | | .3287 | | | | | |
| 150.000 | | | .5522 | .4151 | .3494 | .2906 | | | | .1724 | -.0994 | -.0856 | -.0664 | -.0357 | |
| 151.000 | | | | | | | | | .8248 | | | | | | |
| 156.000 | | | | | | | | .8394 | | | | | | | |
| 162.000 | | | | | | | | | 1.0129 | | | | | | |
| 165.000 | | | | | | | | | | .0702 | -.1145 | -.0766 | -.0545 | -.0317 | |
| 169.000 | | | | | | | | 1.0453 | | | | | | | |
| 174.000 | | | | | | | .7789 | | | | | | | | |
| 180.000 | 1.4430 | .8118 | .4813 | .3890 | .3354 | .2936 | | 1.0901 | | -.0437 | -.1262 | -.0601 | -.0386 | -.0283 | |
| 305.000 | | | .3621 | .3457 | .3751 | .1161 | | .1684 | | .0732 | | | | | |
| 320.000 | | | .3953 | .4353 | .4329 | .1348 | | .0854 | | .0121 | .1103 | -.0591 | -.0869 | -.0634 | -.0496 |
| 340.000 | | | .4128 | .5130 | .3277 | .2184 | | .0397 | | -.0002 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0358 | .1162 | .4512 | .3098 | -.1370 | -.2033 | -.1619 | | -.0702 | -.0813 |
| 40.000 | -.0006 | .1206 | .2631 | -.0225 | -.1678 | -.1495 | -.1204 | | -.1658 | -.1264 |
| 70.000 | -.0276 | -.0597 | -.0595 | .0093 | .0000 | -.0058 | -.0307 | | | |
| 90.000 | -.0175 | -.0145 | -.0459 | .0908 | .0226 | -.0038 | -.0303 | | | |
| 105.000 | | | -.0266 | .1169 | .0293 | -.0461 | -.0769 | | | |
| 110.000 | | | | | | | | -.1130 | | |
| 120.000 | -.0445 | -.0033 | .1243 | .1554 | .1510 | .0169 | -.0525 | -.1089 | | |
| 135.000 | | | .1683 | .1945 | .1535 | .0203 | -.0269 | | | |
| 150.000 | -.0344 | -.0280 | .1453 | .1814 | .0222 | .0935 | .0945 | | | |
| 165.000 | -.0334 | | .1128 | | .2785 | .2119 | -.0664 | | | |
| 180.000 | -.0330 | -.0334 | -.0046 | .2274 | | | | | | |
| 320.000 | .0325 | .1403 | .3640 | .1831 | -.0765 | -.1356 | -.1895 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET845)

ALPHAO( 4) = -.108 BETAO ( 4) = -.175

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4240 | .7732 | .4031 | .4825 | .3391 | .2358 | | .0492 | | -.0419 | .2012 | -.0246 | -.0490 | -.1243 | .0314 |
| 20.000 | | | .3663 | .5066 | .4412 | .2552 | | .0518 | | .0013 | | | | | |
| 40.000 | | | .3675 | .4570 | .5228 | .1395 | | .1834 | | -.0413 | .0550 | -.0196 | -.0047 | .0356 | -.0326 |
| 55.000 | | | .4406 | .3268 | .4544 | .2458 | | .2550 | | .1386 | | | | | |
| 70.000 | | | .4718 | .2541 | .2717 | .2888 | | .2323 | | .1778 | -.0090 | -.0260 | -.0341 | -.0731 | |
| 90.000 | | .6719 | .5044 | .3094 | .2204 | .2362 | | .2857 | | .0000 | .0330 | -.0160 | -.0609 | -.0744 | |
| 120.000 | | | .5367 | .3903 | .2742 | .2355 | | .3738 | | .3158 | .0670 | -.1074 | -.0833 | -.0496 | |
| 140.000 | | | | | | | | | | .2319 | | | | | |
| 150.000 | | | .5123 | .3824 | .3279 | .2782 | | | | .1153 | -.1029 | -.0820 | -.0586 | -.0205 | |
| 151.000 | | | | | | | | | .7520 | | | | | | |
| 156.000 | | | | | | | | .8198 | | | | | | | |
| 162.000 | | | | | | | | | .9907 | | | | | | |
| 165.000 | | | | | | | | | | .0520 | -.1283 | -.0556 | -.0361 | -.0164 | |
| 169.000 | | | | | | | | 1.1012 | | | | | | | |
| 174.000 | | | | | | | .8614 | | | | | | | | |
| 180.000 | 1.4240 | .7920 | .4679 | .3718 | .3365 | .2981 | | 1.1194 | | -.0450 | -.1253 | -.0731 | -.0176 | -.0130 | |
| 305.000 | | | .4876 | .3936 | .3890 | .1652 | | .2260 | | .1096 | | | | | |
| 320.000 | | | .5614 | .4468 | .3588 | .1885 | | .1115 | | .0043 | .1446 | -.0612 | -.0520 | -.0188 | -.0221 |
| 340.000 | | | .5300 | .4699 | .3068 | .2005 | | .0313 | | .0540 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0171 | .2043 | .3501 | .2706 | -.1286 | -.1908 | -.1253 | | -.0768 | -.0985 |
| 40.000 | -.0501 | .1440 | .2561 | .0057 | -.1854 | -.0989 | -.1448 | | -.0980 | -.1074 |
| 70.000 | -.0316 | -.0659 | -.0762 | .0203 | .0000 | -.0219 | -.0461 | | | |
| 90.000 | -.0228 | -.0235 | -.0572 | .0546 | .0045 | -.0212 | -.0407 | | | |
| 105.000 | | | -.0259 | .1089 | -.0155 | -.0658 | -.0965 | | | |
| 110.000 | | | | | | | | -.1219 | | |
| 120.000 | -.0437 | -.0109 | .1228 | .1379 | .1390 | .0092 | -.0550 | -.1223 | | |
| 135.000 | | | .0977 | .1937 | .1315 | .0163 | -.0077 | | | |
| 150.000 | -.0282 | -.0308 | -.0159 | .2032 | .0589 | .0745 | .0840 | | | |
| 165.000 | -.0255 | | -.0322 | | .2741 | .1655 | -.1044 | | | |
| 180.000 | -.0229 | -.0285 | -.0325 | .2802 | | | | | | |
| 320.000 | .0351 | .1972 | .3670 | .1319 | -.1148 | -.1317 | -.1870 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB45)

ALPHAO( 4) = -.100 BETAO ( 5) = 1.938

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1880 | .1770 | .2040 | .2510 | .3010 | .3780 | .4870 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4495 | .7820 | .3883 | .5096 | .2700 | .3481 | | -.0203 | | .0062 | .1775 | -.0182 | -.0593 | - 3742 | -.0306 |
| 20.000 | | | .3857 | .5063 | .1912 | .2256 | | .0161 | | .0148 | | | | | |
| 40.000 | | | .3906 | .4832 | .3648 | .1489 | | .1239 | | -.0682 | .0528 | .0235 | -.0329 | -.0028 | -.0191 |
| 55.000 | | | .3784 | .3711 | .3254 | .1265 | | .2141 | | .1084 | | | | | |
| 70.000 | | | .4008 | .2927 | .2737 | .1869 | | .2340 | | .1513 | -.0228 | -.0405 | -.0477 | -.0871 | |
| 90.000 | | .5950 | .4367 | .2657 | .2123 | .1899 | | .1728 | | .0000 | .0152 | -.0382 | -.0772 | -.0825 | |
| 120.000 | | | .4798 | .3514 | .2380 | .2076 | | .3100 | | .2118 | .0432 | -.1248 | -.0858 | -.0494 | |
| 140.000 | | | | | | | | | | .1232 | | | | | |
| 150.000 | | | .4758 | .3685 | .3104 | .2550 | | | | .0905 | -.1285 | -.0904 | -.0428 | -.0205 | |
| 151.000 | | | | | | | | | .7293 | | | | | | |
| 156.000 | | | | | | | | 1.0344 | | | | | | | |
| 162.000 | | | | | | | | | .8982 | | | | | | |
| 165.000 | | | | | | | | | | .0372 | -.1312 | -.0732 | -.0216 | -.0137 | |
| 169.000 | | | | | | | | 1.0232 | | | | | | | |
| 174.000 | | | | | | | .8084 | | | | | | | | |
| 180.000 | 1.4495 | .7741 | .4673 | .3755 | .3307 | .2904 | | 1.0852 | | -.0468 | -.1238 | -.0606 | -.0289 | -.0144 | |
| 305.000 | | | .4788 | .3237 | .4243 | .3751 | | .2677 | | .1521 | | | | | |
| 320.000 | | | .4607 | .4485 | .4362 | .2280 | | .1437 | | -.0075 | .1015 | -.0494 | -.0540 | .0159 | -.0343 |
| 340.000 | | | .5093 | .4858 | .2375 | .3840 | | -.0348 | | .0605 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0356 | .1942 | .3525 | .3427 | -.1158 | -.1377 | -.1237 | | -.0988 | -.1018 |
| 40.000 | -.0235 | .0827 | .3567 | .0720 | -.1799 | -.1353 | -.1614 | | -.0924 | -.1031 |
| 70.000 | -.0413 | -.0740 | -.0833 | .0077 | .0000 | -.0412 | -.0637 | | | |
| 90.000 | -.0387 | -.0343 | -.0657 | .0443 | -.0145 | -.0304 | -.0472 | | | |
| 105.000 | | | -.0291 | .0553 | -.0378 | -.0824 | -.1025 | | | |
| 110.000 | | | | | | | | -.1325 | | |
| 120.000 | -.0595 | -.0366 | .0243 | .1079 | .1019 | -.0189 | -.0867 | -.1355 | | |
| 135.000 | | | .0240 | .1876 | .0931 | .0060 | -.0233 | | | |
| 150.000 | -.0326 | -.0389 | -.0159 | .1916 | .1154 | .0383 | .0353 | | | |
| 165.000 | -.0309 | | -.0427 | | .2189 | .1124 | -.1227 | | | |
| 180.000 | -.0285 | -.0318 | -.0376 | .2523 | | | | | | |
| 320.000 | .0375 | .1786 | .3376 | .0263 | -.1377 | -.1409 | -.1490 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB45)

ALPHA0( 4) = -.095 BETA0 ( 6) = 3.383

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0480 | .0730 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4820 | .7729 | .1974 | .6387 | .3373 | .4059 | | .0306 | | .0286 | .1038 | -.0506 | -.0978 | -.0288 | -.1126 |
| 20.300 | | | .2018 | .5652 | .3270 | .3023 | | .0461 | | -.0666 | | | | | |
| 40.000 | | | .2608 | .4877 | .3927 | .1766 | | .0988 | | -.0340 | .0356 | -.0150 | -.0463 | -.0252 | -.0092 |
| 55.000 | | | .3086 | .2381 | .3650 | .0803 | | .1855 | | .0691 | | | | | |
| 70.000 | | | .3372 | .1928 | .1815 | .1686 | | .1871 | | .1354 | -.0420 | -.0649 | -.0575 | -.0981 | |
| 90.000 | | .5430 | .3766 | .2111 | .1448 | .1400 | | .1070 | | .0000 | .0089 | -.0536 | -.0856 | -.0816 | |
| 120.000 | | | .4259 | .3070 | .2010 | .1626 | | .2741 | | .1820 | -.0247 | -.1295 | -.0793 | -.0572 | |
| 140.000 | | | | | | | | | | .0878 | | | | | |
| 150.000 | | | .4400 | .3470 | .2923 | .2350 | | | | .0575 | -.1368 | -.0810 | -.0533 | -.0298 | |
| 151.000 | | | | | | | | | .6133 | | | | | | |
| 156.000 | | | | | | | | .8177 | | | | | | | |
| 162.000 | | | | | | | | | .8901 | | | | | | |
| 165.000 | | | | | | | | | | .0066 | -.1238 | -.0744 | -.0391 | -.0264 | |
| 169.000 | | | | | | | | 1.0091 | | | | | | | |
| 174.000 | | | | | | | .8412 | | | | | | | | |
| 180.000 | 1.4820 | .7775 | .4624 | .3693 | .3313 | .2893 | | 1.0761 | | -.0410 | -.1261 | -.0569 | -.0440 | -.0341 | |
| 305.000 | | | .5535 | .3693 | .6666 | .4174 | | .2771 | | .1893 | | | | | |
| 320.000 | | | .3921 | .3603 | .6916 | .2366 | | .2224 | | .0040 | .1357 | -.0533 | -.0506 | .0548 | -.0062 |
| 340.000 | | | .2737 | .6235 | .4916 | .3904 | | -.0623 | | .0921 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0466 | .1834 | .3317 | .3462 | -.1505 | -.1330 | -.1243 | | -.0968 | -.1045 |
| 40.000 | -.0062 | .0908 | .3972 | .0623 | -.1701 | -.1296 | -.1515 | | -.0924 | -.1005 |
| 70.000 | -.0486 | -.0825 | -.0915 | -.0016 | .0000 | -.0473 | -.0718 | | | |
| 90.000 | -.0523 | -.0469 | -.0675 | .0329 | -.0328 | -.0352 | -.0496 | | | |
| 105.000 | | | -.0131 | .0268 | -.0925 | -.0959 | -.1101 | | | |
| 110.000 | | | | | | | | -.1397 | | |
| 120.000 | -.0853 | -.0709 | .0339 | .0647 | .0633 | -.0502 | -.1041 | -.1542 | | |
| 135.000 | | | -.0138 | .1476 | .0606 | -.0173 | -.0509 | | | |
| 150.000 | -.0500 | -.0537 | -.0006 | .1523 | .0896 | -.0035 | -.0200 | | | |
| 165.000 | -.0473 | | .0630 | | .1389 | .0638 | -.1404 | | | |
| 180.000 | -.0382 | -.0462 | .1052 | .1611 | | | | | | |
| 320.000 | .0295 | .1519 | .3330 | -.0588 | -.1630 | -.1613 | -.1145 | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB45)

ALPHA0( 4) = -.000 BETA0 ( 7) = 6.020

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0006 | .0230 | .0480 | .0790 | .1120 | .1500 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4409 | .7822 | .2882 | .6930 | .2812 | .2351 | | .0510 | | .0583 | .0917 | -.0602 | -.1416 | -.0621 | -.0857 |
| 20.000 | | | .2809 | .6029 | .1996 | .1844 | | -.0071 | | -.0582 | | | | | |
| 40.000 | | | .2378 | .4950 | .2402 | .1784 | | .0200 | | -.0487 | .0550 | -.0346 | -.0723 | -.0561 | -.0348 |
| 55.000 | | | .2545 | 2616 | .2446 | .0593 | | .0956 | | .0382 | | | | | |
| 70.000 | | | .2812 | .2039 | .1953 | .1077 | | .0844 | | .1095 | -.0522 | -.0832 | -.0723 | -.1066 | |
| 90.000 | | .4906 | .3259 | .1663 | .1363 | .1030 | | .0768 | | .0000 | .0001 | -.0703 | -.1046 | -.0878 | |
| 120.000 | | | .3841 | .2646 | .1577 | .1284 | | .2432 | | .1260 | -.0572 | -.1723 | -.0862 | -.0772 | |
| 140.000 | | | | | | | | | | .0437 | | | | | |
| 150.000 | | | .4094 | .3252 | .2668 | .2134 | | | | .0300 | -.1485 | -.0881 | -.0677 | -.0503 | |
| 151.000 | | | | | | | | | .5666 | | | | | | |
| 156.000 | | | | | | | | .0077 | | | | | | | |
| 162.000 | | | | | | | | | .8795 | | | | | | |
| 165.000 | | | | | | | | | | -.0526 | -.1305 | -.0759 | -.0574 | -.0661 | |
| 169.000 | | | | | | | | 1.0333 | | | | | | | |
| 174.000 | | | | | | | .8271 | | | | | | | | |
| 180.000 | 1.4408 | .7857 | .4610 | .3702 | .3255 | .2948 | | 1.0458 | | -.0289 | -.1319 | -.0739 | -.0693 | -.0611 | |
| 305.000 | | | .6201 | .5957 | .6711 | .4610 | | .2689 | | .2186 | | | | | |
| 320.000 | | | .4224 | .7686 | .6084 | .2601 | | .2755 | | .0484 | .1130 | -.0396 | -.0310 | -.0099 | -.0012 |
| 340.000 | | | .3216 | .7395 | .4155 | .2956 | | -.0361 | | .1253 | | | | | |

| X/LB | .0520 | .7280 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.1950 | .0813 | .3435 | .3506 | -.1089 | -.1248 | -.1185 | | -.0815 | -.0909 |
| 40.000 | .0227 | .1103 | .3489 | .1158 | -.1609 | -.1343 | -.1364 | | -.0835 | -.0925 |
| 70.000 | -.0546 | -.0820 | -.0950 | -.0261 | .0000 | -.0530 | -.0742 | | | |
| 90.000 | -.0584 | -.0476 | -.0707 | .0556 | -.0523 | -.0671 | -.0708 | | | |
| 105.000 | | | .0262 | .0310 | -.0864 | -.1110 | -.1219 | | | |
| 110.000 | | | | | | | | -.1485 | | |
| 120.000 | -.1005 | -.0838 | .0600 | .0088 | .0238 | -.0795 | -.1377 | -.1670 | | |
| 135.000 | | | .0546 | .0932 | .0274 | -.0452 | -.0711 | | | |
| 150.000 | -.0872 | -.0704 | .0526 | .1144 | .0678 | -.0462 | -.0678 | | | |
| 165.000 | -.0651 | | .0702 | | .0901 | .0279 | -.1345 | | | |
| 180.000 | -.0831 | -.0588 | .1029 | .0821 | | | | | | |
| 320.000 | -.0214 | .1885 | .2884 | -.0978 | -.1485 | -.1286 | -.1152 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET845)

ALPHAO( 5) = 1.933 BETAO ( 1) = -.155

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3390 | .8500 | .6263 | .5243 | .1012 | .0993 | | .0081 | | .0223 | .1660 | -.0259 | -.0660 | -.0855 | .0286 |
| 20.000 | | | .6006 | .4978 | .1900 | .1407 | | -.0193 | | .0137 | | | | | |
| 40.000 | | | .5578 | .4420 | .3402 | .1584 | | .1870 | | -.0305 | .0234 | -.0193 | -.0429 | -.0330 | -.0375 |
| 55.000 | | | .5137 | .3702 | .3522 | .2423 | | .2171 | | .1190 | | | | | |
| 70.000 | | | .4785 | .3255 | .2961 | .2336 | | .2055 | | .1461 | -.0243 | -.0436 | -.0548 | -.0871 | |
| 90.000 | | .6230 | .4756 | .3225 | .2390 | .2282 | | .2636 | | .0000 | .0094 | -.0248 | -.0730 | -.0937 | |
| 120.000 | | | .4841 | .3632 | .2439 | .2175 | | .3356 | | .2759 | .0510 | -.1145 | -.1033 | -.0746 | |
| 140.000 | | | | | | | | | | .2135 | | | | | |
| 150.000 | | | .4499 | .3405 | .2810 | .2403 | | | | .0970 | -.1179 | -.1027 | -.0796 | -.0415 | |
| 151.000 | | | | | | | | | .6911 | | | | | | |
| 156.000 | | | | | | | | .7372 | | | | | | | |
| 162.000 | | | | | | | | | .9206 | | | | | | |
| 165.000 | | | | | | | | | | .0290 | -.1419 | -.0772 | -.0538 | -.0361 | |
| 169.000 | | | | | | | | .9928 | | | | | | | |
| 174.000 | | | | | | | .7690 | | | | | | | | |
| 180.000 | 1.3390 | .7128 | .4061 | .3292 | .2904 | .2566 | | 1.0181 | | -.0599 | -.1409 | -.0908 | -.0380 | -.0341 | |
| 305.000 | | | .5618 | .4026 | .2910 | .1587 | | .2006 | | .0990 | | | | | |
| 320.000 | | | .6383 | .5124 | .2182 | .1220 | | .1128 | | -.0483 | .1270 | -.0716 | -.0535 | -.0351 | -.0364 |
| 340.000 | | | .6707 | .5253 | .1026 | .0969 | | .0071 | | .0544 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0145 | .2009 | .3485 | .2617 | -.1551 | -.1730 | -.1175 | | -.0719 | -.0971 |
| 40.000 | -.0422 | .1595 | .2640 | .0382 | -.1845 | -.1166 | -.1370 | | -.1133 | -.1059 |
| 70.000 | -.0506 | -.0840 | -.0929 | .0021 | .0000 | -.0427 | -.0663 | | | |
| 90.000 | -.0381 | -.0425 | -.0706 | .0484 | -.0157 | -.0387 | -.0602 | | | |
| 105.000 | | | -.0439 | .0744 | -.0299 | -.0761 | -.0986 | | | |
| 110.000 | | | | | | | | -.1339 | | |
| 120.000 | -.0482 | -.0219 | .0998 | .1153 | .1109 | -.0074 | -.0757 | -.1302 | | |
| 135.000 | | | .1190 | .1659 | .1153 | .0030 | -.0242 | | | |
| 150.000 | -.0506 | -.0432 | .0318 | .1828 | .0474 | .0596 | .0579 | | | |
| 165.000 | -.0489 | | -.0429 | | .2530 | .1356 | -.1057 | | | |
| 180.000 | -.0445 | -.0476 | -.0463 | .2554 | | | | | | |
| 320.000 | .0401 | .1650 | .4238 | .0613 | -.1082 | -.1326 | -.1703 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET845)

ALPHAO( 6) = 3.402 BETAO ( 1) = -4.411

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3498 | .8136 | .6387 | .4934 | .1228 | .2173 | | .0723 | | .0134 | .1062 | -.0251 | -.0227 | -.0666 | -.0076 |
| 20.000 | | | .6697 | .5842 | .2759 | .2093 | | -.0454 | | .0807 | | | | | |
| 40.000 | | | .7052 | .6443 | .5169 | .2226 | | .2623 | | .0114 | -.0125 | -.0801 | -.0134 | .0424 | .0136 |
| 55.000 | | | .6677 | .5865 | .5528 | .3649 | | .2316 | | .1497 | | | | | |
| 70.000 | | | .6242 | .5030 | .4789 | .3911 | | .2276 | | .1610 | -.0245 | -.0238 | -.0326 | -.0326 | |
| 90.000 | | .7395 | .6038 | .4518 | .4039 | .3937 | | .2593 | | .0000 | .0219 | -.0071 | -.0501 | -.0712 | |
| 120.000 | | | .5695 | .4267 | .3118 | .3161 | | .2821 | | .3202 | .0775 | -.0844 | -.1174 | -.1290 | |
| 140.000 | | | | | | | | | | .3209 | | | | | |
| 150.000 | | | .4819 | .3312 | .2734 | .2410 | | | | .1869 | -.1351 | -.1306 | -.1210 | -.0902 | |
| 151.000 | | | | | | | | | .7843 | | | | | | |
| 156.000 | | | | | | | | .7922 | | | | | | | |
| 162.000 | | | | | | | | | .9084 | | | | | | |
| 165.000 | | | | | | | | | | .0249 | -.1275 | -.1224 | -.1098 | -.0861 | |
| 169.000 | | | | | | | | .8755 | | | | | | | |
| 174.000 | | | | | | | .6598 | | | | | | | | |
| 180.000 | 1.3498 | .6746 | .3739 | .2779 | .2363 | .2116 | | .8696 | | -.0561 | -.1595 | -.1022 | -.0913 | -.0767 | |
| 305.000 | | | .4421 | .2775 | .2326 | .0750 | | .0867 | | .0085 | | | | | |
| 320.000 | | | .5594 | .3970 | .2253 | .1184 | | .0269 | | -.0178 | .0595 | -.0973 | -.1372 | -.0686 | -.0164 |
| 340.000 | | | .6374 | .4459 | .1234 | .0957 | | .0174 | | -.05[illegible] | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0814 | .3021 | .5010 | .4659 | -.0987 | -.2135 | -.1171 | | -.0494 | -.0646 |
| 40.000 | .0780 | .1343 | .3205 | -.0133 | -.1474 | -.1041 | -.1188 | | -.1771 | -.1506 |
| 70.000 | -.0339 | -.0801 | -.0883 | -.0836 | .0000 | -.0130 | -.0350 | | | |
| 90.000 | -.0329 | -.0470 | -.0680 | -.0474 | .0464 | .0032 | -.0417 | | | |
| 105.000 | | | -.0700 | .1083 | .0782 | -.0275 | -.0697 | | | |
| 110.000 | | | | | | | | -.1148 | | |
| 120.000 | -.1084 | -.0927 | -.0116 | .0910 | .1207 | .0084 | -.0407 | -.1000 | | |
| 135.000 | | | .0881 | .0863 | .0959 | -.0125 | -.0522 | | | |
| 150.000 | -.0696 | -.0559 | .0785 | .0687 | -.0550 | -.0387 | -.0188 | | | |
| 165.000 | -.0693 | | .0891 | | .1794 | .1629 | -.0841 | | | |
| 180.000 | -.0743 | -.0653 | .0827 | .0738 | | | | | | |
| 320.000 | .0403 | .1374 | .5722 | .2463 | -.0758 | -.1141 | -.1585 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET845)

ALPHAO( 6) = 3.403 BETAO ( 2) = -.163

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2633 | .9279 | .6784 | .5172 | .0719 | .0954 | | .0065 | | .0672 | .1539 | -.0351 | -.0748 | -.0649 | .0380 |
| 20.000 | | | .6591 | .5621 | .1170 | .0934 | | -.0272 | | .0074 | | | | | |
| 40.000 | | | .6112 | .5307 | .2754 | .1712 | | .1857 | | -.0441 | -.0115 | -.0318 | -.0656 | -.0110 | -.0322 |
| 55.000 | | | .5481 | .4188 | .3218 | .2403 | | .1827 | | .1137 | | | | | |
| 70.000 | | | .5038 | .3598 | .3028 | .2186 | | .1883 | | .1144 | -.0389 | -.0585 | -.0748 | -.0910 | |
| 90.000 | | .6085 | .4779 | .3318 | .2581 | .2129 | | .2269 | | .0000 | -.0141 | -.0424 | -.0871 | -.1109 | |
| 120.000 | | | .4595 | .3365 | .2303 | .2079 | | .3306 | | .2448 | .0335 | -.1218 | -.1241 | -.0993 | |
| 140.000 | | | | | | | | | | .2158 | | | | | |
| 150.000 | | | .4142 | .2985 | .2470 | .2109 | | | | .0895 | -.1298 | -.1215 | -.0986 | -.0581 | |
| 151.000 | | | | | | | | | .6485 | | | | | | |
| 156.000 | | | | | | | | .6706 | | | | | | | |
| 162.000 | | | | | | | | | .8537 | | | | | | |
| 165.000 | | | | | | | | | | .0122 | -.1501 | -.0976 | -.0719 | -.0541 | |
| 169.000 | | | | | | | | .8929 | | | | | | | |
| 174.000 | | | | | | | .6798 | | | | | | | | |
| 180.000 | 1.2633 | .6404 | .3812 | .2864 | .2520 | .2196 | | .9265 | | -.0721 | -.1508 | -.0986 | -.0580 | -.0517 | |
| 305.000 | | | .5475 | .3881 | .2630 | .1758 | | .1873 | | .0932 | | | | | |
| 320.000 | | | .6638 | .4954 | .1892 | .1358 | | .1127 | | -.0589 | .0872 | -.0814 | -.0557 | -.0419 | -.0406 |
| 340.000 | | | .7071 | .4799 | .0666 | .0937 | | -.0266 | | .0539 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1093 | .2361 | .3457 | .2971 | -.1524 | -.1483 | -.1083 | | -.0659 | -.0975 |
| 40.000 | -.0001 | .1946 | .2921 | .0845 | -.1693 | -.1199 | -.1430 | | -.1304 | -.1046 |
| 70.000 | -.0581 | -.0925 | -.1064 | -.0169 | .0000 | -.0578 | -.0760 | | | |
| 90.000 | -.0460 | -.0507 | -.0787 | .0372 | -.0260 | -.0568 | -.0790 | | | |
| 105.000 | | | -.0023 | .0578 | -.0291 | -.0831 | -.1059 | | | |
| 110.000 | | | | | | | | -.1403 | | |
| 120.000 | -.0480 | -.0334 | .0896 | .0959 | .0800 | -.0197 | -.0830 | -.1298 | | |
| 135.000 | | | .0869 | .1236 | .0937 | -.0080 | -.0359 | | | |
| 150.000 | -.0642 | -.0483 | .0544 | .1567 | .0422 | .0543 | .0409 | | | |
| 165.000 | -.0619 | | -.0476 | | .2371 | .1223 | -.0935 | | | |
| 180.000 | -.0602 | -.0615 | -.0530 | .2364 | | | | | | |
| 320.000 | .0566 | .1967 | .4757 | .1111 | -.0939 | -.1197 | -.1598 | | | |

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB45)

ALPHAO( 6) = 3.408 BETAO ( 3) = 3.392

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3135 | .7874 | .6775 | .5116 | .1213 | .1724 | | .0247 | | -.0073 | .0790 | -.0946 | -.1124 | -.0272 | -.1044 |
| 20.000 | | | .6371 | .4667 | .1096 | .0959 | | .0026 | | -.0862 | | | | | |
| 40.000 | | | .5440 | .4459 | .1860 | .1430 | | .0584 | | -.0852 | .0177 | -.0346 | -.0906 | -.0463 | .0283 |
| 55.000 | | | .4518 | .3472 | .2211 | .0662 | | .1370 | | .0284 | | | | | |
| 70.000 | | | .3798 | .2894 | .2247 | .0842 | | .1750 | | .0845 | -.0729 | -.0933 | -.0878 | -.1282 | |
| 90.000 | | .4870 | .3405 | .2538 | .1927 | .1189 | | .1100 | | .0000 | -.0313 | -.0823 | -.1097 | -.1206 | |
| 120.000 | | | .3391 | .2551 | .1724 | .1544 | | .2213 | | .1253 | -.0200 | -.1533 | -.1206 | -.0896 | |
| 140.000 | | | | | | | | | | .0657 | | | | | |
| 150.000 | | | .3385 | .2588 | .2135 | .1741 | | | | .039 | -.1589 | -.1157 | -.0751 | -.0642 | |
| 151.000 | | | | | | | | | .5472 | | | | | | |
| 156.000 | | | | | | | | .6798 | | | | | | | |
| 162.000 | | | | | | | | | .7940 | | | | | | |
| 165.000 | | | | | | | | | | -.0273 | -.1496 | -.1021 | -.0675 | -.0632 | |
| 169.000 | | | | | | | | .8578 | | | | | | | |
| 174.000 | | | | | | | .8675 | | | | | | | | |
| 180.000 | 1.3135 | .8483 | .3672 | .2784 | .2429 | .2138 | | .9218 | | -.0693 | -.1532 | -.0942 | -.0817 | -.0676 | |
| 305.000 | | | .6677 | .5631 | .4088 | .3521 | | .2206 | | .1403 | | | | | |
| 320.000 | | | .7253 | .6288 | .4171 | .2111 | | .2094 | | -.0010 | .0287 | -.0823 | -.0764 | .0016 | -.0281 |
| 340.000 | | | .7235 | .5572 | .2402 | .1654 | | -.0724 | | .0637 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0067 | .1997 | .3583 | .3681 | -.1341 | -.1112 | -.1290 | | -.0915 | -.0995 |
| 40.000 | -.0052 | .1241 | .4612 | .0940 | -.1517 | -.0922 | -.1421 | | -.0938 | -.1062 |
| 70.000 | -.0757 | -.1027 | -.1098 | -.0270 | .0000 | -.0740 | -.0963 | | | |
| 90.000 | -.0693 | -.0750 | -.0946 | -.0061 | -.0537 | -.0605 | -.0767 | | | |
| 105.000 | | | -.0530 | .0139 | -.0902 | -.1179 | -.1297 | | | |
| 110.000 | | | | | | | | -.1559 | | |
| 120.000 | -.1034 | -.0618 | .0146 | .0503 | .0641 | -.0474 | -.1192 | -.1644 | | |
| 135.000 | | | .0619 | .1219 | .0594 | -.0427 | -.0596 | | | |
| 150.000 | -.0818 | -.0818 | .0713 | .0749 | .0287 | -.0336 | -.0511 | | | |
| 165.000 | -.0764 | | .0808 | | .0558 | .0102 | -.1499 | | | |
| 180.000 | -.0743 | -.0693 | .0818 | .0976 | | | | | | |
| 320.000 | .0391 | .1974 | .3296 | .0158 | -.1500 | -.0929 | -.1300 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB45)

ALPHAO( 7) = 6.072 BETAO ( 1) = -.153

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CF

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2350 | 1.0138 | .7376 | .4472 | .0413 | .0868 | | .0211 | | .0872 | .1406 | -.0459 | -.0842 | -.0221 | .0424 |
| 20.000 | | | .7491 | .4931 | .0369 | .0878 | | -.0509 | | .0132 | | | | | |
| 40.000 | | | .6774 | .5691 | .2227 | .1379 | | .1671 | | -.0654 | -.0476 | -.0489 | -.0710 | -.0016 | -.0122 |
| 55.000 | | | .5737 | .4257 | .3138 | .2697 | | .1532 | | .0981 | | | | | |
| 70.000 | | | .5203 | .3732 | .2878 | .1799 | | .1688 | | .0895 | -.0612 | -.0789 | -.0921 | -.0779 | |
| 90.000 | | .5997 | .4910 | .3368 | .2604 | .1996 | | .1899 | | .0000 | -.0302 | -.0551 | -.1001 | -.1202 | |
| 120.000 | | | .4476 | .3201 | .2146 | .1889 | | .2972 | | .2154 | .0128 | -.1282 | -.1404 | -.1182 | |
| 140.000 | | | | | | | | | | .2027 | | | | | |
| 150.000 | | | .3785 | .2661 | .2153 | .1879 | | | | .0786 | -.1447 | -.1371 | -.1083 | -.0770 | |
| 151.000 | | | | | | | | | .6002 | | | | | | |
| 156.000 | | | | | | | | .6141 | | | | | | | |
| 162.000 | | | | | | | | | .7755 | | | | | | |
| 165.000 | | | | | | | | | | -.0042 | -.1587 | -.1130 | -.0855 | -.0716 | |
| 169.000 | | | | | | | | .7969 | | | | | | | |
| 174.000 | | | | | | | .5930 | | | | | | | | |
| 180.000 | 1.2350 | .5799 | .3218 | .2528 | .2176 | .1953 | | .8460 | | -.0843 | -.1583 | -.1004 | -.0733 | -.0686 | |
| 305.000 | | | .5496 | .3698 | .2514 | .3351 | | .1691 | | .0726 | | | | | |
| 320.000 | | | .7005 | .4541 | .1456 | .2143 | | .1093 | | -.0642 | .0479 | -.0935 | -.0584 | -.0406 | -.0244 |
| 340.000 | | | .7557 | .4132 | .0404 | .0718 | | -.0469 | | .0419 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1498 | .2709 | .3742 | .3136 | -.1438 | -.1556 | -.1087 | | -.0628 | -.0920 |
| 40.000 | .0154 | .2220 | .3366 | .1277 | -.1624 | -.1593 | -.1603 | | -.1367 | -.1169 |
| 70.000 | -.0669 | -.1023 | -.1158 | -.1047 | .0000 | -.0619 | -.0867 | | | |
| 90.000 | -.0541 | -.0602 | -.0874 | .0049 | -.0007 | -.0477 | -.0918 | | | |
| 105.000 | | | -.0506 | .0715 | .0013 | -.0802 | -.1147 | | | |
| 110.000 | | | | | | | | -.1498 | | |
| 120.000 | -.0625 | -.0455 | .0617 | .0726 | .0405 | -.0392 | -.0827 | -.1279 | | |
| 135.000 | | | .0563 | .0807 | .0456 | -.0095 | -.0281 | | | |
| 150.000 | -.0716 | -.0543 | .0522 | .1010 | .0402 | .0340 | .0033 | | | |
| 165.000 | -.0720 | | -.0015 | | .2112 | .0974 | -.0999 | | | |
| 180.000 | -.0784 | -.0671 | -.0505 | .2349 | | | | | | |
| 320.000 | .0600 | .2288 | .5082 | .1936 | -.0816 | -.1350 | -.1690 | | | |

ARC97-019 ;AB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB46) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.550 RN/FT = 2.500
ELV-1B = 10.000 ELV-0B = -4.000
RUDDER = .000 SPDBRK = .000

ALPHAO( 1) = -6.268 BETAO ( 1) = .417

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4753 | 1.0430 | .5774 | .2879 | .2999 | 1.0623 | | -.0782 | | -.2716 | .0304 | -.0080 | .0688 | .0105 | -.1724 |
| 20.000 | | | .5887 | .3044 | .3122 | .7617 | | -.1390 | | -.2008 | | | | | |
| 40.000 | | | .6691 | .3737 | .2931 | .5316 | | -.0754 | | -.1801 | -.0273 | -.0048 | .0982 | -.1357 | -.0396 |
| 55.000 | | | .7094 | .4527 | .3785 | .4008 | | .1719 | | .0510 | | | | | |
| 70.000 | | | .7088 | .4718 | .3766 | .3388 | | .2763 | | .1390 | -.1900 | -.1935 | -.0937 | .0015 | |
| 90.000 | | .8486 | .7295 | .5071 | .3902 | .3372 | | .3570 | | .0000 | -.1593 | -.1972 | -.1732 | .0044 | |
| 120.000 | | | .7492 | .5741 | .4525 | .4376 | | .5946 | | .1662 | -.0925 | -.3085 | -.1454 | -.0254 | |
| 140.000 | | | | | | | | | | .0461 | | | | | |
| 150.000 | | | .7443 | .6084 | .5212 | .5170 | | | | -.0670 | -.2102 | -.1102 | -.0746 | -.0770 | |
| 151.000 | | | | | | | | | .7414 | | | | | | |
| 156.000 | | | | | | | | 1.0087 | | | | | | | |
| 162.000 | | | | | | | | | .8127 | | | | | | |
| 165.000 | | | | | | | | | | -.0605 | -.1935 | -.0723 | -.0539 | -.0588 | |
| 169.000 | | | | | | | | 1.1065 | | | | | | | |
| 174.000 | | | | | | | 1.1802 | | | | | | | | |
| 180.000 | 1.4753 | .9564 | .7169 | .6188 | .5538 | .5487 | | 1.0977 | | -.1955 | -.2059 | -.0228 | -.0461 | -.0542 | |
| 305.000 | | | .7162 | .4491 | .3978 | .4111 | | .1037 | | .0379 | | | | | |
| 320.000 | | | .6609 | .3277 | .3081 | .5406 | | -.1129 | | -.1580 | .0255 | -.0697 | -.0002 | .0294 | -.0849 |
| 340.000 | | | .6304 | .2740 | .3052 | .7724 | | -.1943 | | -.1208 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0433 | .1923 | .3805 | .2749 | -.1800 | -.1965 | -.1822 | | -.1500 | -.1444 |
| 40.000 | -.0188 | .1315 | .2425 | -.0540 | -.2015 | -.2253 | -.2393 | | -.1428 | -.1526 |
| 70.000 | .0284 | -.0641 | -.0047 | .1513 | .7902 | .0308 | -.0898 | | | |
| 90.000 | .0367 | -.0202 | .1304 | .1632 | .0345 | .0289 | -.0107 | | | |
| 105.000 | | | .2167 | .1288 | -.0608 | -.0588 | -.0569 | | | |
| 110.000 | | | | | | | | -.1456 | | |
| 120.000 | .0069 | .0318 | .2653 | .1493 | .0583 | -.0938 | -.1740 | -.1839 | | |
| 135.000 | | | .3331 | .3841 | .1172 | .0543 | .0167 | | | |
| 150.000 | -.0026 | .0245 | .3370 | .3959 | .2002 | .1452 | .0718 | | | |
| 165.000 | .0033 | | .3278 | | .4352 | .2291 | -.1413 | | | |
| 180.000 | .0043 | .0182 | .3317 | .5003 | | | | | | |
| 320.000 | -.0017 | .1840 | .3628 | .0944 | -.2318 | -.1592 | -.2017 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB46)

ALPHAO( 2) = -4.270 BETAO ( 1) = -3.851

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4347 | 1.0254 | .5669 | .2742 | .2639 | 1.0869 | | -.0510 | | -.1999 | .0701 | -.0446 | .0495 | -.1360 | -.0703 |
| 20.000 | | | .6324 | .3535 | .2495 | .7967 | | -.2302 | | -.1061 | | | | | |
| 40.000 | | | .7863 | .4687 | .3359 | .5654 | | -.0074 | | -.2431 | -.0514 | -.0517 | .0764 | -.0943 | .0033 |
| 55.000 | | | .8645 | .6009 | .4671 | .3935 | | .2038 | | .0835 | | | | | |
| 70.000 | | | .8447 | .6223 | .4748 | .3603 | | .2682 | | .1829 | -.1428 | -.1315 | -.0793 | -.0008 | |
| 90.000 | | .9826 | .8396 | .6293 | .4751 | .3756 | | .3553 | | .0000 | -.1050 | -.1462 | -.1350 | .0095 | |
| 120.000 | | | .8083 | .6322 | .4959 | .4668 | | .6370 | | .2437 | -.0423 | -.2570 | -.1430 | .0050 | |
| 140.000 | | | | | | | | | | .2090 | | | | | |
| 150.000 | | | .7349 | .5768 | .4956 | .4783 | | | | .0022 | -.2407 | -.1613 | -.0892 | -.0555 | |
| 151.000 | | | | | | | | | .7975 | | | | | | |
| 156.000 | | | | | | | | 1.0403 | | | | | | | |
| 162.000 | | | | | | | | | .8486 | | | | | | |
| 165.000 | | | | | | | | | | -.0840 | -.2049 | -.1279 | -.0837 | -.0784 | |
| 169.000 | | | | | | | | 1.0875 | | | | | | | |
| 174.000 | | | | | | | 1.1551 | | | | | | | | |
| 180.000 | 1.4347 | .8865 | .6359 | .5430 | .4809 | .4656 | | 1.0161 | | -.1826 | -.2323 | -.1036 | -.0850 | -.0931 | |
| 305.000 | | | .5197 | .2758 | .2815 | .3487 | | .0090 | | -.0711 | | | | | |
| 320.000 | | | .5420 | .2364 | .2787 | .4607 | | -.2237 | | -.2255 | -.0456 | -.1119 | -.0556 | .0501 | -.0022 |
| 340.000 | | | .5817 | .2271 | .2547 | .6965 | | -.1061 | | -.2928 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0441 | .2835 | .5420 | .2737 | -.1188 | -.1958 | -.1506 | | -.1084 | -.1039 |
| 40.000 | .0743 | .1168 | .2934 | -.0667 | -.2299 | -.2361 | -.2958 | | -.0980 | -.1009 |
| 70.000 | .0301 | -.0685 | -.0802 | .0705 | .8154 | .0345 | -.0771 | | | |
| 90.000 | .0439 | -.0284 | -.0395 | .1374 | .0440 | .0195 | -.0140 | | | |
| 105.000 | | | .0330 | .1885 | -.0300 | -.0834 | -.0588 | | | |
| 110.000 | | | | | | | | -.1408 | | |
| 120.000 | .0023 | .0032 | .2442 | .2267 | .0878 | -.0620 | -.0918 | -.1199 | | |
| 135.000 | | | .3048 | .3190 | .1024 | .0161 | .0563 | | | |
| 150.000 | -.0362 | -.0119 | .2998 | .3167 | .1043 | .1945 | .1178 | | | |
| 165.000 | -.0477 | | .2842 | | .4597 | .3030 | -.1127 | | | |
| 180.000 | -.0568 | -.0234 | .2645 | .3193 | | | | | | |
| 320.000 | -.0719 | .2314 | .4509 | .3102 | -.1588 | -.1081 | -.1415 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB46)

ALPHAO( 2) = -4.251 BETAO ( 2) = .391

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4398 | 1.1548 | .5781 | .2108 | .1761 | .9428 | | -.1749 | | -.1787 | .0253 | -.0780 | .0823 | .0163 | -.1470 |
| 20.000 | | | .5993 | .2475 | .1655 | .6746 | | -.2559 | | -.1379 | | | | | |
| 40.000 | | | .6848 | .3275 | .1961 | .4857 | | -.0847 | | -.2823 | -.0301 | -.0220 | .0938 | -.1271 | -.0334 |
| 55.000 | | | .7153 | .4250 | .3224 | .2980 | | .1378 | | .0329 | | | | | |
| 70.000 | | | .6937 | .4502 | .3405 | .2499 | | .2370 | | .1216 | -.1933 | -.1920 | -.1300 | -.0315 | |
| 90.000 | | .8227 | .7029 | .4814 | .3542 | .2783 | | .3350 | | .0000 | -.1701 | -.2059 | -.1985 | -.0216 | |
| 120.000 | | | .7089 | .5385 | .4175 | .3850 | | .5693 | | .1561 | -.1112 | -.3172 | -.1670 | -.0420 | |
| 140.000 | | | | | | | | | | .0423 | | | | | |
| 150.000 | | | .6873 | .5573 | .4748 | .4449 | | | | -.0842 | -.2351 | -.1402 | -.1004 | -.0959 | |
| 151.000 | | | | | | | | | .7214 | | | | | | |
| 156.000 | | | | | | | | .9847 | | | | | | | |
| 162.000 | | | | | | | | | .7891 | | | | | | |
| 165.000 | | | | | | | | | | -.0825 | -.2235 | -.1061 | -.0809 | -.0842 | |
| 169.000 | | | | | | | | 1.0769 | | | | | | | |
| 174.000 | | | | | | | 1.1355 | | | | | | | | |
| 180.000 | 1.4398 | .8830 | .6549 | .5655 | .5083 | .4710 | | 1.0689 | | -.2229 | -.2280 | -.0570 | -.0733 | -.0787 | |
| 305.000 | | | .7058 | .4183 | .3700 | .3662 | | .0862 | | .0179 | | | | | |
| 320.000 | | | .6723 | .2889 | .2337 | .5226 | | -.1191 | | -.2644 | .0111 | -.1074 | -.0041 | .0300 | -.0845 |
| 340.000 | | | .6395 | .2028 | .1722 | .7421 | | -.3078 | | -.0996 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0824 | .2041 | .3593 | .2729 | -.1844 | -.1886 | -.1642 | | -.1352 | -.1326 |
| 40.000 | -.0191 | .1432 | .2645 | -.0036 | -.2164 | -.2441 | -.2390 | | -.1265 | -.1401 |
| 70.000 | .0138 | -.0881 | -.0415 | .1090 | .6971 | .0043 | -.1011 | | | |
| 90.000 | .0229 | -.0451 | .1022 | .1224 | .0046 | -.0010 | -.0344 | | | |
| 105.000 | | | .1869 | .1214 | -.0839 | -.0858 | -.0796 | | | |
| 110.000 | | | | | | | | -.1619 | | |
| 120.000 | -.0025 | .0124 | .2306 | .1234 | .0536 | -.1033 | -.1804 | -.1895 | | |
| 135.000 | | | .3000 | .3353 | .0986 | .0229 | .0021 | | | |
| 150.000 | -.0253 | .0150 | .3072 | .3633 | .1759 | .1231 | .0525 | | | |
| 165.000 | -.0224 | | .3072 | | .3923 | .2010 | -.1440 | | | |
| 180.000 | -.0227 | .0072 | .3091 | .4533 | | | | | | |
| 320.000 | -.0008 | .2101 | .3958 | .1348 | -.2222 | -.1625 | -.1970 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB48)

ALPHAO( 2) = -4.215 BETAO ( 3) = 3.923

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4402 | 1.0198 | .5740 | .2730 | .2570 | 1.0992 | | -.0972 | | -.1511 | -.1126 | -.1110 | .1198 | .0298 | -.1541 |
| 20.000 | | | .5336 | .2414 | .2516 | .6610 | | -.1617 | | -.2943 | | | | | |
| 40.000 | | | .5313 | .2576 | .2190 | .4242 | | -.1805 | | -.1977 | -.0713 | -.0826 | -.0116 | -.2075 | -.1496 |
| 55.000 | | | .5352 | .2908 | .2315 | .3206 | | .0570 | | -.0488 | | | | | |
| 70.000 | | | .5447 | .3030 | .2427 | .2333 | | .1930 | | .0628 | -.2544 | -.2750 | -.1676 | -.0331 | |
| 90.000 | | .6018 | .5609 | .3464 | .2484 | .2164 | | .2858 | | .0000 | -.2285 | -.2726 | -.2330 | -.0474 | |
| 120.000 | | | .5978 | .4271 | .3209 | .2300 | | .4779 | | 0695 | -.1741 | -.3594 | -.2161 | -.1313 | |
| 140.000 | | | | | | | | | | -.0923 | | | | | |
| 150.000 | | | .6137 | .5075 | .4239 | .3732 | | | | -.1351 | -.2489 | -.1223 | -.1223 | -.1346 | |
| 151.000 | | | | | | | | | .6013 | | | | | | |
| 156.000 | | | | | | | | .8923 | | | | | | | |
| 162.000 | | | | | | | | | .7034 | | | | | | |
| 165.000 | | | | | | | | | | -.1018 | -.2482 | -.0805 | -.0962 | -.1092 | |
| 169.000 | | | | | | | | 1.0150 | | | | | | | |
| 174.000 | | | | | | | 1.0929 | | | | | | | | |
| 180.000 | 1.4402 | .8280 | .6455 | .5560 | .4930 | .4404 | | 1.0360 | | -.1893 | -.2270 | -.1176 | -.0825 | -.0955 | |
| 305.000 | | | .8672 | .6182 | .5179 | .4251 | | .1624 | | .0920 | | | | | |
| 320.000 | | | .7580 | .4481 | .3627 | .5898 | | -.0208 | | -.2122 | .0727 | -.1814 | .0190 | -.1431 | -.0466 |
| 340.000 | | | .6712 | .3154 | .2613 | .8105 | | -.2949 | | -.0839 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0629 | .1995 | .4013 | .2906 | -.1573 | -.1818 | -.1564 | | -.1227 | -.1237 |
| 40.000 | -.1144 | .0809 | .4222 | .2508 | -.2619 | -.1429 | -.1710 | | -.1276 | -.1360 |
| 70.000 | -.0003 | -.0859 | -.0367 | .1683 | .6702 | .0487 | -.0726 | | | |
| 90.000 | .0033 | -.0446 | .0598 | .1839 | .0693 | .0091 | -.0202 | | | |
| 105.000 | | | .1777 | .1461 | -.0134 | -.0491 | -.0540 | | | |
| 110.000 | | | | | | | | -.1557 | | |
| 120.000 | -.0326 | -.0007 | .1931 | .0268 | .0431 | -.1055 | -.2140 | -.1577 | | |
| 135.000 | | | .2476 | .2610 | .0928 | .0274 | -.0234 | | | |
| 150.000 | -.0593 | -.0252 | .2587 | .2878 | .1216 | .0564 | .0186 | | | |
| 165.000 | -.0681 | | .2593 | | .2764 | .1069 | -.1512 | | | |
| 180.000 | -.0834 | -.0334 | .2891 | .3155 | | | | | | |
| 320.000 | .0587 | .2224 | .3249 | -.0406 | -.1949 | -.1691 | -.2616 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RET848)

ALPHAO( 3) = -2.110 BETAO ( 1) = .382

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4281 | 1.1484 | .5693 | .1783 | .1494 | .8644 | | -.1909 | | -.1451 | -.0026 | -.1260 | .0834 | .0393 | -.0670 |
| 20.000 | | | .5914 | .151 | .1548 | .6065 | | -.2555 | | -.1492 | | | | | |
| 40.000 | | | .6778 | .3005 | .1719 | .4402 | | -.1070 | | -.2984 | -.0499 | -.0486 | .0656 | -.1306 | -.0446 |
| 55.000 | | | .7006 | .4071 | .3043 | .2552 | | .1040 | | -.0035 | | | | | |
| 70.000 | | | .6936 | .4271 | .3265 | .2213 | | .1883 | | .0993 | -.2046 | -.2126 | -.1693 | -.0582 | |
| 90.000 | | .7769 | .6794 | .4575 | .3322 | .2425 | | .2852 | | .0000 | -.1784 | -.2204 | -.2204 | -.0445 | |
| 120.000 | | | .6674 | .4997 | .3835 | .3471 | | .5252 | | .1466 | -.1295 | -.3299 | -.1928 | -.0633 | |
| 140.000 | | | | | | | | | | .0511 | | | | | |
| 150.000 | | | .6341 | .5026 | .4294 | .3873 | | | | -.0998 | -.2632 | -.1744 | -.1299 | -.1220 | |
| 151.000 | | | | | | | | | .7044 | | | | | | |
| 156.000 | | | | | | | | .9574 | | | | | | | |
| 162.000 | | | | | | | | | .7693 | | | | | | |
| 165.000 | | | | | | | | | | -.1059 | -.2510 | -.1398 | -.1134 | -.1117 | |
| 169.000 | | | | | | | | 1.0644 | | | | | | | |
| 174.000 | | | | | | | 1.0421 | | | | | | | | |
| 180.000 | 1.4281 | .8085 | .5955 | .5121 | .4595 | .4063 | | 1.0435 | | -.2456 | -.2510 | -.0925 | -.1055 | -.1071 | |
| 305.000 | | | .6908 | .4071 | .3651 | .3189 | | .0615 | | -.0234 | | | | | |
| 320.000 | | | .6629 | .2783 | .2178 | .4928 | | -.1254 | | -.2817 | -.0173 | -.1315 | -.0172 | .0263 | -.0612 |
| 340.000 | | | .6279 | .1812 | .1481 | .7152 | | -.3342 | | -.1126 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0910 | .2230 | .3581 | .2664 | -.1814 | -.1811 | -.1589 | | -.1307 | -.1301 |
| 40.000 | .0166 | .1734 | .2868 | .0536 | -.2359 | -.2483 | -.2499 | | -.1143 | -.1333 |
| 70.000 | -.0064 | -.1104 | -.0780 | .0744 | .6311 | -.0188 | -.1216 | | | |
| 90.000 | .0033 | -.0709 | .0445 | .0835 | -.0223 | -.0243 | -.0539 | | | |
| 105.000 | | | .1643 | .1228 | -.1058 | -.1197 | -.0983 | | | |
| 110.000 | | | | | | | | -.1777 | | |
| 120.000 | -.0197 | -.0059 | .2145 | .1036 | .0517 | -.1132 | -.1871 | -.1939 | | |
| 135.000 | | | .2635 | .2900 | .0806 | -.0007 | -.0228 | | | |
| 150.000 | -.0404 | -.0004 | .2764 | .3238 | .1338 | .0881 | .0314 | | | |
| 165.000 | -.0398 | | .2790 | | .3513 | .1685 | -.1440 | | | |
| 180.000 | -.0417 | -.0078 | .2800 | .4106 | | | | | | |
| 320.000 | -.0059 | .2385 | .4191 | .1720 | -.2239 | -.1702 | -.2042 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB48)

ALPHAO( 4) = -.014 BETAO ( 1) = -5.856

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3192 | 1.0838 | .5881 | .2367 | .1504 | .9675 | | -.0805 | | -.1712 | -.0779 | -.1704 | -.0923 | -.0892 | -.0338 |
| 20.000 | | | .7001 | .3510 | .1441 | .7897 | | -.2898 | | -.1022 | | | | | |
| 40.000 | | | .8795 | .5251 | .3311 | .4325 | | .0104 | | -.2182 | -.0228 | -.0904 | .1327 | -.0673 | .0609 |
| 55.000 | | | .9343 | .6708 | .5043 | .3206 | | .1902 | | .0514 | | | | | |
| 70.000 | | | .9220 | .6717 | .5021 | .3203 | | .2321 | | .1585 | -.1404 | -.0601 | -.0613 | -.0301 | |
| 90.000 | | 1.0186 | .8669 | .6604 | .4796 | .3508 | | .2748 | | .0000 | -.0958 | -.1312 | -.1078 | -.0294 | |
| 120.000 | | | .7734 | .5864 | .4360 | .3862 | | .5973 | | .2534 | -.0381 | -.2494 | -.1777 | -.0838 | |
| 140.000 | | | | | | | | | | .2283 | | | | | |
| 150.000 | | | .6501 | .4727 | .3972 | .3666 | | | | .0707 | -.2890 | -.2434 | -.1628 | -.1027 | |
| 151.000 | | | | | | | | | .7828 | | | | | | |
| 156.000 | | | | | | | | .9467 | | | | | | | |
| 162.000 | | | | | | | | | .8288 | | | | | | |
| 165.000 | | | | | | | | | | -.1353 | -.2600 | -.1995 | -.1492 | -.1217 | |
| 169.000 | | | | | | | | 1.0354 | | | | | | | |
| 174.000 | | | | | | | .9032 | | | | | | | | |
| 180.000 | 1.3192 | .7750 | .5151 | .4259 | .3653 | .3354 | | .9341 | | -.2211 | -.2862 | -.1878 | -.1483 | -.1433 | |
| 305.000 | | | .4273 | .1473 | .1570 | .2878 | | -.0707 | | -.1768 | | | | | |
| 320.000 | | | .5002 | .1321 | .1567 | .3830 | | -.2806 | | -.2862 | -.1398 | -.1862 | -.1736 | .0509 | .0963 |
| 340.000 | | | .5691 | .1558 | .1456 | .6440 | | -.0830 | | -.3196 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0847 | .3795 | .6537 | .3713 | -.1981 | -.1532 | -.1548 | | -.0944 | -.1111 |
| 40.000 | .1484 | .2038 | .4109 | -.0085 | -.2426 | -.1544 | -.2968 | | -.1281 | -.1102 |
| 70.000 | .0142 | -.1083 | -.1115 | -.1374 | .8140 | .0180 | -.0756 | | | |
| 90.000 | .0338 | -.0654 | -.0786 | .0897 | .0374 | -.0346 | -.0566 | | | |
| 105.000 | | | -.0724 | .1849 | .0022 | -.0960 | -.1194 | | | |
| 110.000 | | | | | | | | -.1870 | | |
| 120.000 | -.0795 | -.0947 | .1427 | .1950 | .0826 | -.0563 | -.1217 | -.1455 | | |
| 135.000 | | | .2346 | .2156 | .0558 | -.0621 | .0319 | | | |
| 150.000 | -.1027 | -.0876 | .2313 | .2137 | -.0411 | .1649 | .0902 | | | |
| 165.000 | -.1166 | | .2220 | | .3995 | .3040 | -.1214 | | | |
| 180.000 | -.1407 | .0287 | .2081 | .2001 | | | | | | |
| 320.000 | -.1043 | .4109 | .6337 | .4918 | -.1961 | -.1091 | -.1535 | | | |

ARC97-019 IA01 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET848)

ALPHAO( 4) = -.012 BETAO ( 2) = -3.894

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4016 | 1.1444 | .5788 | .1960 | .1541 | .9725 | | -.0800 | | -.1978 | .0128 | -.1678 | -.0134 | -.0894 | -.0704 |
| 20.000 | | | .6648 | .2997 | .1323 | .7870 | | -.3024 | | -.1178 | | | | | |
| 40.000 | | | .8360 | .4552 | .2906 | .5474 | | -.0282 | | -.2533 | -.0824 | -.1181 | .0897 | -.0156 | -.0102 |
| 55.000 | | | .8608 | .5999 | .4599 | .2973 | | .1564 | | .0183 | | | | | |
| 70.000 | | | .8354 | .5967 | .4466 | .2844 | | .2054 | | .1297 | -.1687 | -.1368 | -.1216 | -.0402 | |
| 90.000 | | .8101 | .7864 | .5869 | .4321 | .3137 | | .2547 | | .0000 | -.1248 | -.1657 | -.1440 | -.0355 | |
| 120.000 | | | .7233 | .5500 | .4176 | .3767 | | .5713 | | .2176 | -.0757 | -.2774 | -.2042 | -.0768 | |
| 140.000 | | | | | | | | | | .1793 | | | | | |
| 150.000 | | | .6291 | .4741 | .4025 | .3720 | | | | -.0200 | -.2891 | -.2395 | -.1528 | -.1067 | |
| 151.000 | | | | | | | | | .7487 | | | | | | |
| 156.000 | | | | | | | | .9685 | | | | | | | |
| 162.000 | | | | | | | | | .7930 | | | | | | |
| 165.000 | | | | | | | | | | -.1521 | -.2566 | -.1919 | -.1455 | -.1199 | |
| 169.000 | | | | | | | | 1.0210 | | | | | | | |
| 174.000 | | | | | | | 1.0465 | | | | | | | | |
| 180.000 | 1.4018 | .7541 | .5245 | .4447 | .3868 | .3509 | | .9437 | | -.2289 | -.2849 | -.1664 | -.1440 | -.1344 | |
| 305.000 | | | .5107 | .2335 | .1833 | .3039 | | -.0355 | | -.1448 | | | | | |
| 320.000 | | | .5567 | .1777 | .1477 | .4192 | | -.2385 | | -.2512 | -.0964 | -.1752 | -.1096 | .0583 | .1111 |
| 340.000 | | | .5891 | .1503 | .1411 | .6472 | | -.1085 | | -.3024 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0303 | .3295 | .5939 | .3948 | -.1344 | -.1795 | -.1422 | | -.1013 | -.1013 |
| 40.000 | .0718 | .1739 | .3559 | -.0025 | -.2037 | -.2559 | -.3123 | | -.0836 | -.1122 |
| 70.000 | -.0099 | -.1131 | -.1268 | -.0484 | .8123 | -.0037 | -.0911 | | | |
| 90.000 | .0139 | -.0739 | -.0839 | .1056 | -.0047 | -.0502 | -.0670 | | | |
| 105.000 | | | -.0410 | .1545 | -.0337 | -.1179 | -.1210 | | | |
| 110.000 | | | | | | | | -.1792 | | |
| 120.000 | -.0523 | -.0629 | .2000 | .1745 | .0662 | -.0805 | -.1252 | -.1503 | | |
| 135.000 | | | .2135 | .2354 | .0745 | -.0332 | .0082 | | | |
| 150.000 | -.0839 | -.0503 | .2193 | .2441 | .0591 | .1287 | .0638 | | | |
| 165.000 | -.0919 | | .2186 | | .3890 | .2437 | -.1242 | | | |
| 180.000 | -.0897 | -.0455 | .2161 | .2650 | | | | | | |
| 320.000 | -.0253 | .3452 | .5507 | .3942 | -.2124 | -.1043 | -.1621 | | | |

ARC97-019 IA81 LVAP(ALL HL SEALED) ORB. FUSELAGE (RET846)

ALPHAO( 4) = -.017 BETAO ( 3) = -1.729

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1860 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5145 | 1.1548 | .5657 | .1626 | .1333 | .8167 | | -.1370 | | -.1926 | .0172 | -.0682 | -.0524 | -.0298 | -.1104 |
| 20.000 | | | .6155 | .2376 | .1371 | .6889 | | -.3057 | | -.1379 | | | | | |
| 40.000 | | | .7427 | .3545 | .2310 | .5038 | | -.0697 | | -.2840 | -.1060 | -.0592 | .0398 | -.0247 | .0049 |
| 55.000 | | | .7756 | .4946 | .3862 | .2618 | | .1201 | | -.0197 | | | | | |
| 70.000 | | | .7546 | .5028 | .3869 | .2398 | | .1778 | | .0989 | -.1969 | -.1810 | -.1535 | -.0682 | |
| 90.000 | | .8446 | .7289 | .5122 | .3755 | .2738 | | .2279 | | .0000 | -.1562 | -.2020 | -.1756 | -.0521 | |
| 120.000 | | | .6710 | .5059 | .3944 | .3463 | | .5408 | | .1751 | -.1102 | -.3047 | -.2071 | -.0871 | |
| 140.000 | | | | | | | | | | .1283 | | | | | |
| 150.000 | | | .6061 | .4684 | .3960 | .3608 | | | | -.0717 | -.2903 | -.2152 | -.1441 | -.1216 | |
| 151.000 | | | | | | | | | .7130 | | | | | | |
| 156.000 | | | | | | | | .9478 | | | | | | | |
| 162.000 | | | | | | | | | .7619 | | | | | | |
| 165.000 | | | | | | | | | | -.1292 | -.2795 | -.1875 | -.1397 | -.1258 | |
| 169.000 | | | | | | | | 1.0209 | | | | | | | |
| 174.000 | | | | | | | 1.0433 | | | | | | | | |
| 180.000 | 1.5145 | .7455 | .5340 | .4574 | .3998 | .3580 | | .9748 | | -.2480 | -.2792 | -.1434 | -.1372 | -.1303 | |
| 305.000 | | | .6008 | .2848 | .2455 | .3102 | | .0023 | | -.1054 | | | | | |
| 320.000 | | | .6161 | .1957 | .1285 | .4064 | | -.1894 | | -.1575 | -.0701 | -.1652 | -.0792 | .0418 | .0617 |
| 340.000 | | | .6120 | .1362 | .1074 | .5647 | | -.1612 | | -.1766 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0010 | .2925 | .4897 | .3437 | -.1643 | -.1891 | -.1478 | | -.1145 | -.1132 |
| 40.000 | .0948 | .1937 | .3360 | -.0422 | -.2016 | -.2432 | -.3232 | | -.0841 | -.1071 |
| 70.000 | -.0189 | -.1189 | -.1240 | .0097 | .7180 | -.0186 | -.1066 | | | |
| 90.000 | -.0018 | -.0770 | -.0792 | .1054 | -.0315 | -.0538 | -.0761 | | | |
| 105.000 | | | .0577 | .1491 | -.0766 | -.1420 | -.1124 | | | |
| 110.000 | | | | | | | | -.1841 | | |
| 120.000 | -.0430 | -.0361 | .1916 | .1482 | .0416 | -.0976 | -.1519 | -.1709 | | |
| 135.000 | | | .2334 | .2518 | .0535 | -.0192 | -.0199 | | | |
| 150.000 | -.0638 | -.0187 | .2337 | .2586 | .1051 | .1064 | .0347 | | | |
| 165.000 | -.0670 | | .2302 | | .3210 | .2080 | -.1224 | | | |
| 180.000 | -.0638 | -.0254 | .2389 | .3284 | | | | | | |
| 320.000 | -.0555 | .3202 | .4598 | .3599 | -.1860 | -.1385 | -.1709 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) CRB. FUSELAGE (RET846)

ALPHA0( %) = -.000 BETA0 ( %) = .358

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5200 | 1.1947 | .5605 | .1490 | .1188 | .8339 | | -.1607 | | -.1728 | -.0142 | -.1251 | -.0186 | .0459 | .0543 |
| 20.000 | | | .5907 | .1861 | .1355 | .5428 | | -.2055 | | -.1917 | | | | | |
| 40.000 | | | .6844 | .2858 | .1399 | .3993 | | -.1234 | | -.3141 | -.0651 | -.0558 | .0541 | -.1123 | -.6395 |
| 55.000 | | | .6995 | .3343 | .2855 | .2294 | | .0792 | | -.0548 | | | | | |
| 70.000 | | | .6854 | .4116 | .3094 | .1933 | | .1443 | | .0773 | -.2220 | -.2334 | -.1712 | -.0859 | |
| 90.000 | | .7867 | .6757 | .4399 | .3185 | .2206 | | .2190 | | .0000 | -.1885 | -.2337 | -.2183 | -.0645 | |
| 120.000 | | | .6305 | .4612 | .3475 | .3120 | | .5155 | | .1312 | -.1486 | -.3357 | -.2180 | -.0587 | |
| 140.000 | | | | | | | | | | .0385 | | | | | |
| 150.000 | | | .5847 | .4590 | .3896 | .3440 | | | | -.1184 | -.2894 | -.2048 | -.1551 | -.1407 | |
| 151.000 | | | | | | | | | .6708 | | | | | | |
| 156.000 | | | | | | | | .9261 | | | | | | | |
| 162.000 | | | | | | | | | .7375 | | | | | | |
| 165.000 | | | | | | | | | | -.1321 | -.2798 | -.1705 | -.1408 | -.1369 | |
| 169.000 | | | | | | | | 1.0231 | | | | | | | |
| 174.000 | | | | | | | 1.0233 | | | | | | | | |
| 180.000 | 1.5200 | .7353 | .5417 | .4672 | .4147 | .3660 | | 1.0033 | | -.2690 | -.2795 | -.1227 | -.1353 | -.1333 | |
| 305.000 | | | .6760 | .3968 | .3701 | .3120 | | .0430 | | -.0647 | | | | | |
| 320.000 | | | .5562 | .2691 | .2222 | .4831 | | -.1369 | | -.2354 | -.0425 | -.1535 | -.0403 | .0485 | -.0061 |
| 340.000 | | | .6187 | .1581 | .1339 | .7162 | | -.3373 | | -.1276 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1093 | .2629 | .3802 | .2872 | -.1758 | -.1778 | -.1608 | | -.1257 | -.1365 |
| 40.000 | .0829 | .2254 | .3332 | .1105 | - 2524 | -.2595 | -.2709 | | -.1100 | -.1257 |
| 70.000 | -.0228 | -.1279 | -.1171 | .0448 | 3560 | -.0336 | -.1193 | | | |
| 90.000 | -.0071 | -.0790 | .0406 | .0899 | -.0039 | -.0510 | -.0747 | | | |
| 105.000 | | | .1376 | .0941 | -.1115 | -.1375 | -.1184 | | | |
| 110.000 | | | | | | | | -.1919 | | |
| 120.000 | -.0324 | -.0220 | .2010 | .1266 | .0571 | -.1107 | -.1836 | -.1871 | | |
| 135.000 | | | .2029 | .2304 | .0877 | -.0124 | -.0391 | | | |
| 150.000 | -.0943 | -.0107 | .2367 | .2167 | .0983 | .0704 | .0123 | | | |
| 165.000 | -.0562 | | .2521 | | .3159 | .1403 | -.1466 | | | |
| 180.000 | -.0588 | -.0133 | .2553 | .3773 | | | | | | |
| 320.000 | .0347 | .2917 | .2410 | .1935 | -.2347 | -.1794 | -.2295 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB46)

ALPHAO( 4) = .002 BETAO ( 5) = 2.458

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4353 | 1.1436 | .5858 | .1972 | .1565 | 1.0364 | | -.1431 | | -.2052 | -.0640 | -.1133 | .0037 | .0150 | .0564 |
| 20.000 | | | .5680 | .2007 | .1562 | .6549 | | -.1877 | | -.2978 | | | | | |
| 40.000 | | | .6107 | .2598 | .1343 | .4277 | | -.1745 | | -.2725 | -.0372 | -.1291 | .0234 | -.1513 | -.0822 |
| 55.000 | | | .6082 | .3284 | .2333 | .2569 | | .0395 | | -.0994 | | | | | |
| 70.000 | | | .5923 | .3472 | .2533 | .1989 | | .1189 | | .0445 | -.2464 | -.2644 | -.2196 | -.0774 | |
| 90.000 | | .6556 | .5973 | .3785 | .2642 | .1914 | | .2250 | | .0000 | -.2146 | -.2628 | -.2524 | -.0743 | |
| 120.000 | | | .5961 | .4257 | .3150 | .2769 | | .4742 | | .0325 | -.1732 | -.3624 | -.2283 | -.1400 | |
| 140.000 | | | | | | | | | | -.0451 | | | | | |
| 150.000 | | | .5633 | .4480 | .3721 | .3240 | | | | -.1439 | -.2858 | -.2027 | -.1682 | -.1639 | |
| 151.000 | | | | | | | | | .6196 | | | | | | |
| 156.000 | | | | | | | | .8750 | | | | | | | |
| 162.000 | | | | | | | | | .6952 | | | | | | |
| 165.000 | | | | | | | | | | -.1350 | -.2859 | -.1425 | -.1472 | -.1477 | |
| 169.000 | | | | | | | | .9827 | | | | | | | |
| 174.000 | | | | | | | 1.0336 | | | | | | | | |
| 180.000 | 1.4353 | .7273 | .5487 | .4689 | .4086 | .3596 | | .9855 | | -.2474 | -.2717 | -.1525 | -.1413 | -.1381 | |
| 305.000 | | | .7774 | .5231 | .4392 | .3459 | | .0764 | | -.0246 | | | | | |
| 320.000 | | | .7597 | .3828 | .2863 | .5385 | | -.0822 | | -.2685 | -.0098 | -.1782 | -.0019 | -.0256 | -.0426 |
| 340.000 | | | .6752 | .2320 | .1570 | .7823 | | -.3482 | | -.1335 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1222 | .2590 | .4066 | .3135 | -.1590 | -.1738 | -.1513 | | -.1175 | -.1197 |
| 40.000 | -.0985 | .2310 | .4609 | .2630 | -.2535 | -.1574 | -.1832 | | -.1105 | -.1259 |
| 70.000 | -.0285 | -.1154 | -.0719 | .0620 | .6727 | -.0454 | -.1452 | | | |
| 90.000 | -.0130 | -.0691 | .0531 | .0572 | -.0563 | -.0598 | -.0813 | | | |
| 105.000 | | | .1459 | .0912 | -.1328 | -.1475 | -.1302 | | | |
| 110.000 | | | | | | | | -.1963 | | |
| 120.000 | -.0339 | -.0110 | .1855 | .0547 | .0128 | -.1471 | -.2254 | -.1720 | | |
| 135.000 | | | .2431 | .2555 | .0512 | -.0484 | -.0768 | | | |
| 150.000 | -.0821 | -.0128 | .2508 | .2520 | .0887 | .0273 | -.0372 | | | |
| 165.000 | -.0649 | | .2467 | | .2648 | .1047 | -.1500 | | | |
| 180.000 | -.0812 | -.0261 | .2390 | .3153 | | | | | | |
| 320.000 | .1248 | .2697 | .3349 | .0295 | -.2131 | -.1717 | -.2535 | | | |

BEST AVAILABLE COPY

ARC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB46)

ALPHAO( 4) = .017 BETAO ( 6) = 3.895

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4195 | 1.1031 | .5890 | .2018 | .1254 | 1.0111 | | -.1339 | | -.1800 | -.1165 | -.2006 | -.1017 | .0467 | -.0937 |
| 20.000 | | | .5396 | .1678 | .1372 | .6268 | | -.1987 | | -.3131 | | | | | |
| 40.000 | | | .5235 | .2033 | .1185 | .3890 | | -.2140 | | -.2442 | -.0967 | -.1373 | .0103 | -.1729 | -.1122 |
| 55.000 | | | .4986 | .2436 | .1693 | .2718 | | .0062 | | -.1138 | | | | | |
| 70.000 | | | .4946 | .2570 | .1884 | .1774 | | .1017 | | .0240 | -.2711 | -.3004 | -.2388 | -.0782 | |
| 90.000 | | .5586 | .5141 | .3025 | .2046 | .1671 | | .2196 | | .0000 | -.2928 | -.2953 | -.2813 | -.0851 | |
| 120.000 | | | .5259 | .3677 | .2641 | .2319 | | .4318 | | .0553 | -.2050 | -.3834 | -.2447 | -.1829 | |
| 140.000 | | | | | | | | | | -.0995 | | | | | |
| 150.000 | | | .5219 | .4160 | .3398 | .2840 | | | | -.1663 | -.2953 | -.1882 | -.1754 | -.1752 | |
| 151.000 | | | | | | | | | .5609 | | | | | | |
| 156.000 | | | | | | | | .8326 | | | | | | | |
| 162.000 | | | | | | | | | .6530 | | | | | | |
| 165.000 | | | | | | | | | | -.1483 | -.2959 | -.1413 | -.1526 | -.1526 | |
| 169.000 | | | | | | | | .9651 | | | | | | | |
| 174.000 | | | | | | | .9020 | | | | | | | | |
| 180.000 | 1.4195 | .6963 | .5340 | .4528 | .3940 | .3395 | | .3754 | | -.2302 | -.2720 | -.1779 | -.1463 | -.1367 | |
| 305.000 | | | .8650 | .6081 | .4997 | .3301 | | .1182 | | .0119 | | | | | |
| 320.000 | | | .8102 | .4350 | .3177 | .5274 | | -.0384 | | -.2239 | .0569 | -.1623 | -.0836 | -.1679 | -.0285 |
| 340.000 | | | .6998 | .2588 | .1503 | .7805 | | -.3484 | | -.1106 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1861 | .2784 | .4495 | .3692 | -.1608 | -.1726 | -.1485 | | -.1119 | -.1157 |
| 40.000 | -.0839 | .2121 | .5198 | .3702 | -.2798 | -.1554 | -.1733 | | -.1103 | -.1262 |
| 70.000 | -.0208 | -.1049 | .0398 | .1486 | .6462 | .0105 | -.1067 | | | |
| 90.000 | -.0087 | -.0616 | .1100 | .1591 | .0383 | -.0131 | -.0520 | | | |
| 105.000 | | | .1842 | .1788 | -.0329 | -.0676 | -.0829 | | | |
| 110.000 | | | | | | | | -.1853 | | |
| 120.000 | -.0348 | .0012 | .1979 | .0986 | .0517 | -.1042 | -.1974 | -.1577 | | |
| 135.000 | | | .2272 | .2330 | .1094 | -.0065 | -.0533 | | | |
| 150.000 | -.0776 | -.0150 | .2279 | .2273 | .1330 | .0416 | -.0189 | | | |
| 165.000 | -.0905 | | .2244 | | .1957 | .0922 | -.0516 | | | |
| 180.000 | -.1335 | -.0571 | .2221 | .2509 | | | | | | |
| 320.000 | .1284 | .2963 | .3635 | .0083 | -.1815 | -.1764 | -.2732 | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET846)

ALPHAO( 4) = .028 BETAO ( 7) = 6.518

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3924 | 1.0578 | .5731 | .1947 | .0815 | .9461 | | -.1426 | | -.1644 | -.2184 | -.1829 | -.1880 | .0335 | -.1046 |
| 20.000 | | | .4937 | .1300 | .1025 | .5731 | | -.2116 | | -.2980 | | | | | |
| 40.000 | | | .4248 | .1378 | .0912 | .3322 | | -.2586 | | -.2467 | -.1459 | -.1490 | -.0428 | -.0877 | .0563 |
| 55.000 | | | .3963 | .1499 | .1057 | .2255 | | -.0223 | | -.1314 | | | | | |
| 70.000 | | | .4124 | .1670 | .1228 | .1362 | | .0874 | | -.0012 | -.2878 | -.3227 | -.2534 | -.0874 | |
| 90.000 | | .4450 | .4465 | .2153 | .1219 | .1378 | | .2109 | | .0000 | -.2602 | -.3144 | -.2939 | -.0911 | |
| 120.000 | | | .4642 | .3067 | .1922 | .1776 | | .3865 | | .0159 | -.2215 | -.3951 | -.2661 | -.2204 | |
| 140.000 | | | | | | | | | | -.1634 | | | | | |
| 150.000 | | | .4680 | .3780 | .2915 | .2401 | | | | -.1905 | -.2985 | -.1702 | -.1852 | -.1851 | |
| 151.000 | | | | | | | | | .4819 | | | | | | |
| 156.000 | | | | | | | | .8035 | | | | | | | |
| 162.000 | | | | | | | | | .5923 | | | | | | |
| 165.000 | | | | | | | | | | -.1832 | -.2969 | -.1606 | -.1587 | -.1596 | |
| 169.000 | | | | | | | | .9064 | | | | | | | |
| 174.000 | | | | | | | .9642 | | | | | | | | |
| 180.000 | 1.3924 | .6714 | .5055 | .4299 | .3690 | .3105 | | .8974 | | -.2350 | -.2699 | -.1895 | -.1481 | -.1399 | |
| 305.000 | | | .9501 | .6863 | .5603 | .3490 | | .1538 | | .0454 | | | | | |
| 320.000 | | | .8509 | .4825 | .3347 | .4110 | | -.0012 | | -.1875 | .1185 | -.1148 | .0098 | -.1250 | .0334 |
| 340.000 | | | .7075 | .2713 | .1443 | .7989 | | -.3310 | | -.0944 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1724 | .3105 | .4608 | .3782 | -.1691 | -.1863 | -.1613 | | -.1221 | -.1269 |
| 40.000 | -.1030 | .2012 | .5685 | .4522 | -.2838 | -.1512 | -.1677 | | -.1237 | -.1373 |
| 70.000 | .0518 | -.0461 | -.0342 | .1014 | .5934 | -.0171 | -.1382 | | | |
| 90.000 | .0649 | .0156 | .0270 | .1529 | .0027 | -.0588 | -.0855 | | | |
| 105.000 | | | .0836 | .2613 | -.1005 | -.1171 | -.1179 | | | |
| 110.000 | | | | | | | | -.1931 | | |
| 120.000 | -.0095 | .0496 | .1809 | .2482 | -.0005 | -.1213 | -.2112 | -.1880 | | |
| 135.000 | | | .1981 | .2097 | .0750 | -.0315 | -.0931 | | | |
| 150.000 | -.0251 | .1421 | .1733 | .2061 | .1098 | -.0095 | -.0690 | | | |
| 165.000 | -.0798 | | .1707 | | .1450 | .0443 | -.1699 | | | |
| 180.000 | -.1647 | .1208 | .1879 | .1395 | | | | | | |
| 320.000 | .1794 | .3213 | .3756 | -.0369 | -.1987 | -.1845 | -.2969 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB46)

ALPHAO( 5) = 2.074 BETAO ( 1) = .362

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5183 | 1.1599 | .5515 | .1250 | .1053 | .8322 | | -.1517 | | -.1665 | -.0005 | -.1264 | -.0687 | .0482 | .0888 |
| 20.000 | | | .5856 | .1670 | .1119 | .5297 | | -.2143 | | -.1835 | | | | | |
| 40.000 | | | .6816 | .2802 | .1268 | .3881 | | -.1326 | | -.3108 | -.0913 | -.0709 | .0028 | -.0453 | -.0144 |
| 55.000 | | | .6862 | .3899 | .2826 | .2130 | | .0588 | | -.0799 | | | | | |
| 70.000 | | | .6692 | .4008 | .2988 | .1686 | | .1175 | | .0328 | -.2273 | -.1996 | -.1930 | -.1128 | |
| 90.000 | | .7686 | .6565 | .4195 | .3013 | .1993 | | .1621 | | .0000 | -.1981 | -.2346 | -.2188 | -.0851 | |
| 120.000 | | | .5955 | .4254 | .3128 | .2818 | | .4875 | | .1175 | -.1582 | -.3369 | -.2290 | -.1327 | |
| 140.000 | | | | | | | | | | .0322 | | | | | |
| 150.000 | | | .5379 | .4120 | .3444 | .3072 | | | | -.1340 | -.3077 | -.2327 | -.1771 | -.1457 | |
| 151.000 | | | | | | | | | .6385 | | | | | | |
| 156.000 | | | | | | | | .8881 | | | | | | | |
| 162.000 | | | | | | | | | .6968 | | | | | | |
| 165.000 | | | | | | | | | | -.1541 | -.3029 | -.1998 | -.1697 | -.1457 | |
| 169.000 | | | | | | | | .9683 | | | | | | | |
| 174.000 | | | | | | | 1.0095 | | | | | | | | |
| 180.000 | 1.5163 | .6587 | .4878 | .4213 | .3676 | .3252 | | .9516 | | -.2860 | -.2995 | -.1523 | -.1631 | -.1454 | |
| 305.000 | | | .5723 | .4111 | .3648 | .2976 | | .0210 | | -.0815 | | | | | |
| 320.000 | | | .6599 | .2683 | .2179 | .4581 | | -.1559 | | -.3033 | -.0128 | -.1948 | -.0537 | .0735 | .0513 |
| 340.000 | | | .6111 | .1380 | ..175 | .7011 | | -.3517 | | -.1395 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1609 | .3160 | .4298 | .3187 | -.1570 | -.1707 | -.1503 | | -.1188 | -.1188 |
| 40.000 | .1442 | .2775 | .3752 | .1351 | -.2276 | -.2289 | -.2562 | | -.0916 | -.1147 |
| 70.000 | -.0337 | -.1391 | -.1420 | -.0099 | .5486 | -.0467 | -.1265 | | | |
| 90.000 | -.0137 | -.0886 | -.0752 | .0865 | -.0531 | -.0919 | -.1088 | | | |
| 105.000 | | | .0757 | .1396 | -.0985 | -.1707 | -.1474 | | | |
| 110.000 | | | | | | | | -.1902 | | |
| 120.000 | -.0445 | -.0252 | .1678 | .1542 | .0134 | -.1088 | -.1757 | -.1845 | | |
| 135.000 | | | .1653 | .2313 | .1056 | -.0193 | -.0621 | | | |
| 150.000 | -.0645 | .0124 | .1578 | .2529 | .1059 | .0530 | -.0101 | | | |
| 165.000 | -.0645 | | .2063 | | .2669 | .1157 | -.1382 | | | |
| 180.000 | -.0708 | -.0150 | .2221 | .3349 | | | | | | |
| 320.000 | .1208 | .3400 | .4667 | .2164 | -.2365 | -.1674 | -.2337 | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB46)

ALPHAO( 6) = 3.563 BETAO ( 1) = -3.860

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5028 | 1.1600 | .5379 | .1067 | .0948 | .7047 | | -.1285 | | -.1589 | .0418 | -.1813 | -.1623 | .0315 | .0089 |
| 20.000 | | | .6355 | .2144 | .0778 | .6169 | | -.3432 | | -.0782 | | | | | |
| 40.000 | | | .8252 | .4053 | .2308 | .2573 | | -.0282 | | -.1685 | -.0960 | -.1064 | .0271 | .0293 | .0724 |
| 55.000 | | | .8612 | .5739 | .4286 | .1937 | | .1133 | | .0469 | | | | | |
| 70.000 | | | .8249 | .5723 | .4233 | .2210 | | .1535 | | .0692 | -.1259 | -.0979 | -.1424 | -.0799 | |
| 90.000 | | .9269 | .7694 | .5546 | .3978 | .2564 | | .1678 | | .0000 | -.1136 | -.1434 | -.1611 | -.0895 | |
| 120.000 | | | .6346 | .4569 | .3197 | .2760 | | .4675 | | .1773 | -.1033 | -.2681 | -.2526 | -.1580 | |
| 140.000 | | | | | | | | | | .1405 | | | | | |
| 150.000 | | | .5085 | .3565 | .3061 | .2754 | | | | -.0581 | -.3308 | -.2921 | -.1872 | -.1549 | |
| 151.000 | | | | | | | | | .8891 | | | | | | |
| 156.000 | | | | | | | | .9269 | | | | | | | |
| 162.000 | | | | | | | | | .7198 | | | | | | |
| 165.000 | | | | | | | | | | -.1780 | -.2997 | -.2417 | -.1735 | -.1607 | |
| 169.000 | | | | | | | | .9501 | | | | | | | |
| 174.000 | | | | | | | 1.0164 | | | | | | | | |
| 180.000 | 1.5028 | .5971 | .4105 | .3475 | .2958 | .2629 | | .8582 | | -.2662 | -.3223 | -.2090 | -.1835 | -.1632 | |
| 305.000 | | | .4657 | .1705 | .1397 | .2313 | | -.0636 | | -.1676 | | | | | |
| 320.000 | | | .5216 | .1064 | .0979 | .3250 | | -.2417 | | -.1833 | -.1142 | -.2015 | -.1337 | .0403 | .0959 |
| 340.000 | | | .5527 | .0602 | .0853 | .4638 | | -.1359 | | -.0901 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1977 | .3877 | .5756 | .4367 | -.1833 | -.1931 | -.1457 | | -.0981 | -.0965 |
| 40.000 | .1680 | .2670 | .3937 | .0095 | -.1817 | -.1509 | -.2504 | | -.0284 | -.1034 |
| 70.000 | -.0403 | -.1432 | -.1682 | -.1622 | .6306 | -.0548 | -.1098 | | | |
| 90.000 | -.0210 | -.1013 | -.1377 | .0458 | -.0351 | -.0847 | -.1114 | | | |
| 105.000 | | | -.1201 | .0990 | -.0466 | -.1485 | -.1689 | | | |
| 110.000 | | | | | | | | -.2198 | | |
| 120.000 | -.1372 | -.1415 | .1693 | .1309 | .0583 | -.1009 | -.1689 | -.1787 | | |
| 135.000 | | | .2071 | .1870 | .0310 | -.1130 | -.0863 | | | |
| 150.000 | -.1127 | -.0486 | .1941 | .1829 | -.1388 | .0537 | .0346 | | | |
| 165.000 | -.1105 | | .1766 | | .2788 | .1692 | -.1320 | | | |
| 180.000 | -.0902 | .0420 | .1877 | .2029 | | | | | | |
| 320.000 | .1705 | .4602 | .6353 | .4925 | -.1897 | -.1000 | -.1419 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB48)

ALPHAO( 6) = 3.585 BETAO ( 2) = .374

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5021 | 1.1751 | .5444 | .0998 | .0894 | .8579 | | -.1594 | | -.1529 | .0106 | -.1382 | -.0916 | .0775 | .0968 |
| 20.000 | | | .5798 | .1426 | .0913 | .5485 | | -.2382 | | -.1644 | | | | | |
| 40.000 | | | .6845 | .2690 | .1251 | .3870 | | -.1361 | | -.2963 | -.1335 | -.0732 | -.0041 | .0043 | .0025 |
| 55.000 | | | .6864 | .3870 | .2849 | .2012 | | .0467 | | -.0755 | | | | | |
| 70.000 | | | .6600 | .3926 | .2920 | .1524 | | .0987 | | -.0061 | -.1998 | -.1919 | -.1922 | -.1306 | |
| 90.000 | | .7468 | .6402 | .4056 | .2858 | .1844 | | .1353 | | .0000 | -.2070 | -.2128 | -.2337 | -.1029 | |
| 120.000 | | | .5677 | .3941 | .2776 | .2521 | | .4639 | | .1095 | -.1668 | -.3405 | -.2449 | -.1480 | |
| 140.000 | | | | | | | | | | .0339 | | | | | |
| 150.000 | | | .4948 | .3692 | .3050 | .2699 | | | | -.1464 | -.3276 | -.2576 | -.1947 | -.1596 | |
| 151.000 | | | | | | | | | .6191 | | | | | | |
| 156.000 | | | | | | | | .8735 | | | | | | | |
| 162.000 | | | | | | | | | .6875 | | | | | | |
| 165.000 | | | | | | | | | | -.1753 | -.3207 | -.2212 | -.1944 | -.1503 | |
| 169.000 | | | | | | | | .9359 | | | | | | | |
| 174.000 | | | | | | | .9840 | | | | | | | | |
| 180.000 | 1.5021 | .5940 | .4459 | .3779 | .3261 | .2876 | | .9169 | | -.3044 | -.3176 | -.1782 | -.1885 | -.1449 | |
| 305.000 | | | .6789 | .3988 | .3534 | .2792 | | .0032 | | -.0980 | | | | | |
| 320.000 | | | .6724 | .2602 | .2096 | .4398 | | -.1489 | | -.2861 | -.0079 | -.2112 | -.0549 | .1187 | .0816 |
| 340.000 | | | .6086 | .1230 | .1011 | .6960 | | -.3651 | | -.1363 | | | | | |

| X/LB | .8520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9800 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .2082 | .3607 | .4742 | .3581 | -.1300 | -.1580 | -.1448 | | -.1127 | -.1139 |
| 40.000 | .1899 | .3123 | .4128 | .1289 | -.2185 | -.1873 | -.2196 | | -.0952 | -.1162 |
| 70.000 | -.0385 | -.1494 | -.1635 | -.0475 | .5664 | -.0619 | -.1331 | | | |
| 90.000 | -.0242 | -.0982 | -.1157 | .0659 | -.0619 | -.1125 | -.1315 | | | |
| 105.000 | | | .0356 | .1181 | -.0998 | -.1920 | -.1941 | | | |
| 110.000 | | | | | | | | -.1897 | | |
| 120.000 | -.0601 | -.0383 | .1858 | .1562 | -.0101 | -.1302 | -.1833 | -.1766 | | |
| 135.000 | | | .1795 | .2211 | .0564 | -.0447 | -.0790 | | | |
| 150.000 | -.0614 | .0452 | .1737 | .2306 | .1238 | .0310 | -.0380 | | | |
| 155.000 | -.0614 | | .1896 | | .2290 | .0908 | -.1324 | | | |
| 180.000 | -.0639 | .0073 | .2039 | .2894 | | | | | | |
| 320.000 | .2032 | .3705 | .4885 | .2296 | -.2092 | -.1438 | -.1913 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET846)

ALPHAO( 6) = 3.578 BETAO ( 3) = 3.899

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4700 | 1.1587 | .5434 | .0960 | .0454 | .9724 | | -.1778 | | -.1783 | -.1296 | -.1519 | -.1343 | .0116 | .1579 |
| 20.000 | | | .4975 | .0699 | .0492 | .5814 | | -.2366 | | -.2953 | | | | | |
| 40.000 | | | .4786 | .1230 | .0451 | .3514 | | -.2245 | | -.2810 | -.0615 | -.1613 | -.0037 | .0393 | .1006 |
| 55.000 | | | .4457 | .1858 | .1195 | .2305 | | -.0249 | | -.1553 | | | | | |
| 70.000 | | | .4464 | .2055 | .1419 | .1263 | | .0540 | | -.0258 | -.2768 | -.2837 | -.2610 | -.0945 | |
| 90.000 | | .4954 | .4724 | .2484 | .1556 | .1198 | | .1167 | | .0000 | -.2571 | -.2936 | -.2795 | -.0945 | |
| 120.000 | | | .4557 | .3029 | .1975 | .1842 | | .3933 | | .0377 | -.2297 | -.3982 | -.2569 | -.1546 | |
| 140.000 | | | | | | | | | | -.1127 | | | | | |
| 150.000 | | | .4222 | .3294 | .2612 | .2140 | | | | -.2012 | -.3330 | -.2420 | -.2174 | -.1866 | |
| 151.000 | | | | | | | | | .5120 | | | | | | |
| 156.000 | | | | | | | | .7576 | | | | | | | |
| 162.000 | | | | | | | | | .5916 | | | | | | |
| 165.000 | | | | | | | | | | -.1943 | -.3324 | -.1910 | -.1991 | -.1742 | |
| 169.000 | | | | | | | | .8392 | | | | | | | |
| 174.000 | | | | | | | .8515 | | | | | | | | |
| 180.000 | 1.4700 | .5298 | .4200 | .3555 | .3001 | .2519 | | .8729 | | -.2746 | -.3179 | -.2246 | -.1885 | -.1716 | |
| 305.000 | | | .8920 | .5847 | .4835 | .2665 | | .0810 | | .0245 | | | | | |
| 320.000 | | | .8072 | .3711 | .2637 | .3181 | | -.0472 | | -.1302 | .0528 | -.1779 | -.0270 | -.0970 | .0253 |
| 340.000 | | | .6700 | .1584 | .0552 | .7517 | | -.3574 | | -.0910 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1943 | .3474 | .4936 | .3915 | -.1195 | -.1519 | -.1393 | | -.0994 | -.1077 |
| 40.000 | .0530 | .3664 | .5883 | .4522 | -.2701 | -.1077 | -.1450 | | -.1057 | -.1229 |
| 70.000 | -.0318 | -.0652 | -.0666 | .0430 | .5956 | -.0179 | -.1178 | | | |
| 90.000 | -.0058 | -.0337 | .0372 | .1292 | -.0175 | -.0548 | -.0898 | | | |
| 105.000 | | | .1232 | .1804 | -.0758 | -.1284 | -.1244 | | | |
| 110.000 | | | | | | | | -.2060 | | |
| 120.000 | -.0248 | .0630 | .2071 | .1716 | .0337 | -.1222 | -.2047 | -.1797 | | |
| 135.000 | | | .2103 | .2015 | .0602 | -.0428 | -.0870 | | | |
| 150.000 | -.0550 | .1175 | .1823 | .1627 | .0837 | .0121 | -.0492 | | | |
| 165.000 | -.0665 | | .1766 | | .1461 | .0708 | -.1584 | | | |
| 180.000 | -.1211 | .1102 | .1814 | .1875 | | | | | | |
| 320.000 | .2180 | .3314 | .3750 | .0188 | -.1545 | -.1514 | -.2257 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB46)

ALPHAO( 7) = 8.314 BETAO ( 1) = .393

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4908 | 1.1859 | .5222 | .0724 | .0662 | .8507 | | -.1437 | | -.1520 | -.0063 | -.1878 | -.0381 | .0896 | .1301 |
| 20.000 | | | .5532 | .1142 | .0665 | .5646 | | -.2632 | | -.1530 | | | | | |
| 40.000 | | | .6718 | .2537 | .1205 | .3761 | | -.1331 | | -.2993 | -.1687 | -.0811 | .0227 | .0457 | .0043 |
| 55.000 | | | .6752 | .3857 | .2852 | .1906 | | .0412 | | -.0703 | | | | | |
| 70.000 | | | .6473 | .3860 | .2845 | .1394 | | .0850 | | -.0141 | -.2092 | -.2108 | -.1944 | -.1262 | |
| 90.000 | | .7314 | .6249 | .3876 | .2702 | .1686 | | .1145 | | .0000 | -.1926 | -.2309 | -.2486 | -.1122 | |
| 120.000 | | | .5430 | .3627 | .2459 | .2254 | | .4304 | | .1039 | -.1753 | -.3321 | -.2844 | -.1247 | |
| 140.000 | | | | | | | | | | .0336 | | | | | |
| 150.000 | | | .4514 | .3272 | .2730 | .2379 | | | | -.1621 | -.3483 | -.2798 | -.2081 | -.1667 | |
| 151.000 | | | | | | | | | .6083 | | | | | | |
| 156.000 | | | | | | | | .8689 | | | | | | | |
| 162.000 | | | | | | | | | .6470 | | | | | | |
| 165.000 | | | | | | | | | | -.1960 | -.3377 | -.2424 | -.2097 | -.1633 | |
| 169.000 | | | | | | | | .9263 | | | | | | | |
| 174.000 | | | | | | | .9408 | | | | | | | | |
| 180.000 | 1.4908 | .5411 | .3974 | .3375 | .2938 | .2462 | | .8866 | | -.3241 | -.3351 | -.2013 | -.2072 | -.1616 | |
| 305.000 | | | .6948 | .3863 | .3404 | .2605 | | -.0056 | | -.0710 | | | | | |
| 320.000 | | | .6780 | .2406 | .1847 | .4106 | | -.1433 | | -.2617 | -.0142 | -.2327 | -.0343 | .1393 | .1674 |
| 340.000 | | | .6012 | .0929 | .0775 | .6759 | | -.3773 | | -.1235 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .2554 | .4061 | .5153 | .3877 | -.1597 | -.1664 | -.1515 | | -.1262 | -.1274 |
| 40.000 | .2339 | .3475 | .4450 | .1560 | -.2569 | -.1601 | -.1874 | | -.1135 | -.1167 |
| 70.000 | -.0519 | -.1667 | -.1789 | -.0571 | .5898 | -.0829 | -.1398 | | | |
| 90.000 | -.0348 | -.1171 | -.1357 | .0499 | -.0794 | -.1304 | -.1468 | | | |
| 105.000 | | | .0304 | .1038 | -.1049 | -.1933 | -.2167 | | | |
| 110.000 | | | | | | | | -.2008 | | |
| 120.000 | -.0850 | -.0528 | .1589 | .1369 | .0072 | -.1455 | -.1935 | -.1731 | | |
| 135.000 | | | .1697 | .2076 | .0244 | -.0756 | -.0989 | | | |
| 150.000 | -.0510 | .0544 | .1655 | .2273 | .0945 | .0181 | -.0467 | | | |
| 165.000 | -.0459 | | .1824 | | .2117 | .0746 | -.1357 | | | |
| 180.000 | -.0418 | .0400 | .1916 | .2827 | | | | | | |
| 320.000 | .2437 | .3953 | .4975 | .2381 | -.1613 | -.1674 | -.2078 | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET847) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.000 RN/FT = 2.500
ELV-IB = 10.000 ELV-OB = -4.000
RUDDER = .000 SPDBRK = .000

ALPHAO( 1) = -6.283 BETAO ( 1) = .072

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5624 | .8403 | .2331 | .6710 | .3708 | .6077 | | .0666 | | -.0377 | .2232 | -.0682 | -.0607 | .0527 | -.0105 |
| 20.000 | | | .2438 | .6097 | .4071 | .4947 | | .0591 | | -.0121 | | | | | |
| 40.000 | | | .3935 | .3677 | .4791 | .5187 | | .1465 | | -.0787 | .0410 | -.0001 | -.0118 | .0314 | .0486 |
| 55.000 | | | .5058 | .3593 | .5167 | .3318 | | .3183 | | .1606 | | | | | |
| 70.000 | | | .5731 | .3122 | .3292 | .3914 | | .3552 | | .2509 | .0078 | -.0199 | -.0146 | -.0287 | |
| 90.000 | | .7908 | .6333 | .3655 | .2654 | .3075 | | .3455 | | .0000 | .0429 | -.0284 | -.0591 | -.0231 | |
| 120.000 | | | .6960 | .5192 | .3805 | .3368 | | .5905 | | .3463 | .0659 | -.1280 | -.0378 | -.0077 | |
| 140.000 | | | | | | | | | | .2096 | | | | | |
| 150.000 | | | .7028 | .5645 | .4829 | .4251 | | | | .1225 | -.0761 | -.0212 | .0045 | .0122 | |
| 151.000 | | | | | | | | | .9226 | | | | | | |
| 156.000 | | | | | | | | 1.2330 | | | | | | | |
| 162.000 | | | | | | | | | 1.0376 | | | | | | |
| 165.000 | | | | | | | | | | .1060 | -.0992 | .0035 | .0317 | .0234 | |
| 169.000 | | | | | | | | 1.2663 | | | | | | | |
| 174.000 | | | | | | | 1.0275 | | | | | | | | |
| 180.000 | 1.5624 | .9956 | .6651 | .5652 | .5066 | .4691 | | 1.2801 | | -.0342 | -.0654 | .0038 | .0399 | .0275 | |
| 305.000 | | | .4659 | .3495 | .4941 | .3858 | | .2621 | | .1281 | | | | | |
| 320.000 | | | .3118 | .5442 | .4554 | .5003 | | .1006 | | .0142 | .1613 | -.0071 | -.0450 | -.0124 | -.0076 |
| 340.000 | | | .2496 | .6789 | .3777 | .4404 | | .0428 | | .0284 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0076 | .2100 | .3733 | .3519 | -.1582 | -.1406 | -.1686 | | -.1173 | -.1233 |
| 40.000 | -.0709 | .1074 | .3013 | -.0523 | -.2120 | -.1246 | -.1996 | | -.1278 | -.1255 |
| 70.000 | .0442 | -.0271 | -.0260 | .1079 | .5092 | .0553 | .0039 | | | |
| 90.000 | .0493 | .0218 | -.0185 | .1559 | .0578 | .0383 | .0176 | | | |
| 105.000 | | | .0425 | .1719 | .0117 | -.0526 | -.0584 | | | |
| 110.000 | | | | | | | | -.0878 | | |
| 120.000 | .0228 | .0473 | .1213 | .1905 | .1798 | .0131 | -.0606 | -.1277 | | |
| 135.000 | | | .1697 | .3183 | .1753 | .0038 | .0697 | | | |
| 150.000 | .0058 | .0 28 | .1079 | .3253 | .1730 | .1805 | .1523 | | | |
| 165.000 | .0074 | | .0335 | | .4088 | .2632 | - 1039 | | | |
| 180.000 | .0119 | .0092 | .0284 | .4037 | | | | | | |
| 320.000 | -.0373 | .1015 | .3810 | .0537 | -.1620 | -.1424 | -.1964 | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB47)

ALPHAO( 2) = -4.315 BETAO ( 1) = -4.217

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5289 | .7932 | .3870 | .6128 | .2445 | .5415 | | .0377 | | .0252 | .1684 | -.0178 | .0152 | -.0190 | -.0060 |
| 20.000 | | | .3982 | .6632 | .3548 | .5053 | | -.0832 | | .0861 | | | | | |
| 40.000 | | | .4584 | .7026 | .5517 | .2881 | | .2202 | | -.0335 | .1036 | -.0434 | .0070 | .0950 | -.0143 |
| 55.000 | | | .6002 | .7038 | .6513 | .4037 | | .3605 | | .2086 | | | | | |
| 70.000 | | | .6735 | .5455 | .6006 | .4631 | | .3502 | | .2558 | .0340 | .0236 | .0111 | -.0293 | |
| 90.000 | | .9011 | .7175 | .4829 | .4973 | .4824 | | .3646 | | .0000 | .0691 | .0164 | -.0190 | -.0274 | |
| 120.000 | | | .7499 | .5655 | .4440 | .4940 | | .6236 | | .4304 | .1150 | -.0916 | -.0540 | -.0152 | |
| 140.000 | | | | | | | | | | .3926 | | | | | |
| 150.000 | | | .7009 | .5326 | .4587 | .4374 | | | | .2155 | -.0902 | -.0675 | -.0352 | -.0018 | |
| 151.000 | | | | | | | | | 1.0177 | | | | | | |
| 156.000 | | | | | | | | 1.1252 | | | | | | | |
| 162.000 | | | | | | | | | 1.1240 | | | | | | |
| 165.000 | | | | | | | | | | .0922 | -.0895 | -.0559 | -.0321 | -.0015 | |
| 169.000 | | | | | | | | 1.2437 | | | | | | | |
| 174.000 | | | | | | | 1.0380 | | | | | | | | |
| 180.000 | 1.5289 | .9503 | .5996 | .4917 | .4399 | .4043 | | 1.2188 | | -.0228 | -.1186 | -.0309 | -.0193 | -.0076 | |
| 305.000 | | | .3295 | .4187 | .3324 | .2543 | | .1486 | | .0382 | | | | | |
| 320.000 | | | .3680 | .5076 | .3065 | .3194 | | .0137 | | -.0256 | .0745 | -.0719 | -.0941 | -.0549 | -.0472 |
| 340.000 | | | .3809 | .5499 | .2439 | .3278 | | .0137 | | -.0579 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0554 | .2267 | .4460 | .2823 | -.1969 | -.2551 | -.1174 | | -.0980 | -.0954 |
| 40.000 | -.1197 | .0800 | .2410 | -.0546 | -.2116 | -.0537 | -.1669 | | -.1534 | -.1356 |
| 70.000 | .0359 | -.0331 | -.0315 | .0252 | .5147 | .0471 | .0059 | | | |
| 90.000 | .0493 | .0190 | -.0222 | .1477 | .0666 | .0324 | .0021 | | | |
| 105.000 | | | -.0017 | .1964 | .0497 | -.0355 | -.0560 | | | |
| 110.000 | | | | | | | | -.0979 | | |
| 120.000 | .0340 | .0425 | .0332 | .2396 | .1829 | .0315 | -.0375 | -.1062 | | |
| 135.000 | | | .2050 | .2716 | .1765 | .0420 | .0245 | | | |
| 150.000 | -.0059 | .0111 | .2108 | .2453 | .0343 | .1941 | .1730 | | | |
| 165.000 | -.0066 | | .1797 | | .4162 | .3372 | -.0439 | | | |
| 180.000 | -.0187 | -.0235 | .1275 | .2354 | | | | | | |
| 330.000 | .0116 | .0861 | .4022 | .2149 | -.1251 | -.1605 | -.1688 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RET847)

ALPHAO( 2) = -4.282 BETAO ( 2) = .044

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1880 | .1770 | .2040 | .2510 | .3010 | .3780 | .4[illegible] | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5303 | .8285 | .3476 | .7117 | .3178 | .5117 | | .0402 | | -.0563 | .2004 | -.0827 | -.0746 | .0248 | -.0094 |
| 20.000 | | | .3295 | .7164 | .3410 | .4244 | | .0335 | | -.0340 | | | | | |
| 40.000 | | | .3760 | .6774 | .4251 | .4492 | | .1350 | | -.0906 | .0436 | -.0365 | -.0328 | .0245 | .0438 |
| 55.000 | | | .4794 | .4148 | .4689 | .2987 | | .2912 | | .1357 | | | | | |
| 70.000 | | | .5446 | .3578 | .4472 | .3597 | | .3138 | | .2086 | -.0121 | -.0375 | -.0322 | -.0620 | |
| 90.000 | | .7583 | .5985 | .3654 | .3105 | .3270 | | .3050 | | .0000 | .0296 | -.0384 | -.0715 | -.0488 | |
| 120.000 | | | .6511 | .4868 | .3505 | .3337 | | .5654 | | .3473 | .0487 | -.1309 | -.0652 | -.0271 | |
| 140.000 | | | | | | | | | | .2716 | | | | | |
| 150.000 | | | .6427 | .5123 | .4341 | .3795 | | | | .1123 | -.0941 | -.0526 | -.0186 | -.0072 | |
| 151.000 | | | | | | | | | .9055 | | | | | | |
| 156.000 | | | | | | | | 1.0667 | | | | | | | |
| 162.000 | | | | | | | | | 1.0203 | | | | | | |
| 165.000 | | | | | | | | | | .0833 | -.1176 | -.0189 | .0043 | .0021 | |
| 169.000 | | | | | | | | 1.2538 | | | | | | | |
| 174.000 | | | | | | | 1.0097 | | | | | | | | |
| 180.000 | 1.5303 | .9359 | .6038 | .5094 | .4552 | .4172 | | 1.2582 | | -.0550 | -.0893 | -.0117 | .0125 | .0063 | |
| 305.000 | | | .4471 | .4789 | .4590 | .3502 | | .2337 | | .1072 | | | | | |
| 320.000 | | | .3549 | .5610 | .4147 | .4266 | | .0779 | | -.0092 | .1390 | -.0369 | -.0674 | -.0162 | -.0175 |
| 340.000 | | | .3754 | .6494 | .3337 | .3594 | | .0257 | | .0077 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0252 | .2480 | .3609 | .3317 | -.1623 | -.1459 | -.1557 | | -.1079 | -.1172 |
| 40.000 | -.0740 | .1395 | .2757 | -.0343 | -.2137 | -.1195 | -.1993 | | -.1153 | -.1294 |
| 70.000 | .0201 | -.0473 | -.0523 | .0694 | .4358 | .0297 | -.0158 | | | |
| 90.000 | .0278 | .0005 | -.0359 | .1312 | .0384 | .0188 | -.0001 | | | |
| 105.000 | | | .0037 | .1463 | -.0047 | -.0645 | -.0723 | | | |
| 110.000 | | | | | | | | -.1034 | | |
| 120.000 | -.0043 | .0282 | .0987 | .1708 | .1681 | .0003 | -.0707 | -.1342 | | |
| 135.000 | | | .1540 | .2834 | .1564 | .0545 | .0375 | | | |
| 150.000 | -.0149 | -.0072 | .0974 | .2863 | .1520 | .1495 | .1267 | | | |
| 165.000 | -.0127 | | .0199 | | .3503 | .2310 | -.1130 | | | |
| 180.000 | -.0101 | -.0117 | .0031 | .3822 | | | | | | |
| 320.000 | -.0399 | .1276 | .3999 | .0399 | -.1575 | -.1474 | -.2070 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB47)

ALPHAO( 2) = -4.245 BETAO ( 3) = 3.589

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1860 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.5224 | .7982 | .3100 | .6648 | .2699 | .5316 | | -.0048 | | .0375 | .0886 | -.0230 | -.1505 | .0171 | .0087 |
| 20.000 | | | .3094 | .6197 | .2568 | .2700 | | .0035 | | -.0768 | | | | | |
| 40.000 | | | .2648 | .5563 | .3139 | .2986 | | .0519 | | -.0356 | .0406 | -.0129 | -.0593 | .0246 | .0123 |
| 55.000 | | | .3387 | .3562 | .3374 | .1608 | | .1829 | | .0592 | | | | | |
| 70.000 | | | .3918 | .2572 | .3065 | .1621 | | .2543 | | .1558 | -.0507 | -.0886 | -.0703 | -.0596 | |
| 90.000 | | .6032 | .4480 | .2422 | .1864 | .1834 | | .1882 | | .0000 | -.0208 | -.0855 | -.1180 | -.0552 | |
| 120.000 | | | .5099 | .3686 | .2458 | .2139 | | .4082 | | .1921 | -.0418 | -.1698 | -.0785 | -.0773 | |
| 140.000 | | | | | | | | | | .0702 | | | | | |
| 150.000 | | | .5463 | .4478 | .3768 | .3158 | | | | .0371 | -.1491 | -.0644 | -.0186 | -.0222 | |
| 151.000 | | | | | | | | | .7140 | | | | | | |
| 156.000 | | | | | | | | .9103 | | | | | | | |
| 162.000 | | | | | | | | | .9433 | | | | | | |
| 165.000 | | | | | | | | | | .0174 | -.1153 | -.0486 | -.0132 | -.0103 | |
| 169.000 | | | | | | | | 1.1854 | | | | | | | |
| 174.000 | | | | | | | 1.0248 | | | | | | | | |
| 180.000 | 1.5224 | .8996 | .5809 | .4869 | .4360 | .3966 | | 1.2278 | | -.0434 | -.1204 | -.0328 | -.0202 | -.0387 | |
| 305.000 | | | .5715 | .4907 | .6752 | .4316 | | .3110 | | .1956 | | | | | |
| 320.000 | | | .3768 | .7396 | .5987 | .2913 | | .1731 | | -.0218 | .1631 | -.0479 | -.0615 | .0319 | -.0061 |
| 340.000 | | | .3193 | .7020 | .3777 | .5128 | | -.1121 | | .0845 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0875 | .1631 | .3042 | .3974 | -.1509 | -.1603 | -.1359 | | -.1038 | -.1063 |
| 40.000 | -.0128 | .0599 | .4232 | .0431 | -.2169 | -.1619 | -.1542 | | -.1124 | -.1208 |
| 70.000 | .0161 | -.0429 | -.0483 | .0589 | .2728 | .0039 | -.0374 | | | |
| 90.000 | .0181 | .0016 | -.0293 | .1309 | -.0036 | -.0167 | -.0313 | | | |
| 105.000 | | | .0857 | .0989 | -.0476 | -.0985 | -.1021 | | | |
| 110.000 | | | | | | | | -.1359 | | |
| 120.000 | -.0483 | -.0008 | .1376 | .0889 | .0593 | -.0464 | -.1250 | -.1771 | | |
| 135.000 | | | .1557 | .2325 | .1034 | .0009 | -.0200 | | | |
| 150.000 | -.0280 | -.0412 | .1189 | .2502 | .1160 | .0504 | .0350 | | | |
| 165.000 | -.0251 | | .0899 | | .2396 | .1312 | -.1417 | | | |
| [illegible] | -.0139 | -.0202 | .1341 | .2592 | | | | | | |
| [illegible] | -.0279 | .1838 | .3339 | -.0646 | -.1609 | -.1420 | -.1719 | | | |

ARC97-013 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET847)

ALPHA0( 3) = -2.148 BETA0 ( 1) = .035

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1500 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4693 | .8181 | .5584 | .6210 | .2264 | .4032 | | .0212 | | -.0777 | .1691 | -.0724 | -.0922 | .0002 | -.0010 |
| 20.000 | | | .5206 | .6459 | .2843 | .3337 | | .0200 | | -.0550 | | | | | |
| 40.000 | | | .5055 | .6289 | .3869 | .3550 | | .1296 | | -.1000 | .0450 | -.0549 | -.0465 | .0091 | .0440 |
| 55.000 | | | .4948 | .5403 | .4452 | .2570 | | 2656 | | .1119 | | | | | |
| 70.000 | | | .5143 | .4452 | .4162 | .3181 | | .2719 | | .1733 | -.0291 | -.0549 | -.0537 | -.0887 | |
| 90.000 | | .7131 | .5598 | .3680 | .3470 | .3206 | | .2606 | | .0000 | .0132 | -.0531 | -.0890 | -.0774 | |
| 120.000 | | | .6038 | .4461 | .3232 | .3292 | | .5072 | | .3292 | .0323 | -.1411 | -.0941 | -.0487 | |
| 140.000 | | | | | | | | | | .2694 | | | | | |
| 150.000 | | | .5887 | .4587 | .3872 | .3438 | | | | .1042 | -.1163 | -.0859 | -.0436 | -.0303 | |
| 151.000 | | | | | | | | | .8572 | | | | | | |
| 156.000 | | | | | | | | .9445 | | | | | | | |
| 162.000 | | | | | | | | | 1.0042 | | | | | | |
| 165.000 | | | | | | | | | | .0503 | -.1354 | -.0455 | -.0209 | -.0207 | |
| 169.000 | | | | | | | | 1.1786 | | | | | | | |
| 174.000 | | | | | | | .9439 | | | | | | | | |
| 180.000 | 1. | .8711 | .5482 | .4537 | .4051 | .3610 | | 1.2038 | | -.0714 | -.1109 | -.0323 | -.0127 | -.0184 | |
| 305.000 | | | .5985 | .4861 | .3818 | .3009 | | .2035 | | .0918 | | | | | |
| 320.000 | | | .6141 | .5690 | .2945 | .3435 | | .0663 | | -.0040 | .1221 | -.0795 | -.0758 | -.0203 | -.0293 |
| 340.000 | | | .6097 | .5788 | .2226 | .2904 | | .0146 | | .0132 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0403 | .2083 | .3584 | .3387 | -.1590 | -.1349 | -.1514 | | -.1045 | -.1148 |
| 40.000 | -.0711 | .1504 | .2642 | -.0102 | -.2018 | -.1091 | -.1871 | | -.0952 | -.1283 |
| 70.000 | -.0065 | -.0679 | -.0670 | .0444 | .2401 | .0096 | -.0315 | | | |
| 90.000 | .0031 | -.0223 | -.0557 | .1073 | .0209 | -.0046 | -.0225 | | | |
| 105.000 | | | -.0099 | .1350 | -.0145 | -.0747 | -.0887 | | | |
| 110.. | | | | | | | | -.1205 | | |
| 120.000 | -.0261 | .0069 | .0870 | .1528 | .1496 | -.0100 | -.0823 | -.1382 | | |
| 135.000 | | | .1334 | .2509 | .1431 | .0321 | .0051 | | | |
| 150.000 | -.0358 | -.0289 | .1057 | .2503 | .1309 | .1170 | .0993 | | | |
| 165.000 | -.0351 | | .0147 | | .3143 | .1974 | -.1183 | | | |
| 180.000 | -.0306 | -.0341 | -.0012 | .3195 | | | | | | |
| 320.000 | -.0351 | .1567 | .3987 | .1329 | -.1445 | -.1437 | -.2044 | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) ORB. FUSELAGE (RETB47)

ALPHA0( 41 = -.077 BETA0 ( 1) = -8.234

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4388 | .7708 | .8751 | .5074 | .1791 | .5017 | | .0568 | | .0348 | -.0155 | .0096 | -.0312 | -.0214 | .0378 |
| 20.000 | | | .7169 | .6289 | .3132 | .4293 | | -.0928 | | .1003 | | | | | |
| 40.000 | | | .7900 | .7358 | .5459 | .2920 | | .2149 | | -.0159 | .0929 | -.0658 | -.0325 | .0652 | .0323 |
| 55.000 | | | .7979 | .7579 | .6680 | .3928 | | .3214 | | .1872 | | | | | |
| 70.000 | | | .7549 | .6853 | .6238 | .4381 | | .2987 | | .2146 | .0131 | .0180 | .0136 | -.0252 | |
| 90.000 | | .8013 | .7398 | .6147 | .5697 | .4557 | | .3242 | | .0000 | .0510 | .0180 | -.0110 | -.0473 | |
| 120.000 | | | .7037 | .5516 | .4595 | .379 | | .4396 | | .3974 | .1072 | -.0827 | -.1000 | -.0795 | |
| 140.000 | | | | | | | | | | .3850 | | | | | |
| 150.000 | | | .6073 | .4364 | .3872 | .3695 | | | | .2179 | -.1446 | -.1177 | -.1039 | -.0658 | |
| 151.000 | | | | | | | | | .9518 | | | | | | |
| 156.000 | | | | | | | | 1.0533 | | | | | | | |
| 162.000 | | | | | | | | | 1.0303 | | | | | | |
| 165.000 | | | | | | | | | | .0249 | -.1163 | -.1189 | -.0931 | -.0633 | |
| 169.000 | | | | | | | | 1.1079 | | | | | | | |
| 174.000 | | | | | | | .8883 | | | | | | | | |
| 180.000 | 1.4388 | .7913 | .4757 | .3727 | .3273 | .3098 | | 1.0105 | | -.0505 | -.1698 | -.0984 | -.0842 | -.0648 | |
| 195.000 | | | .4311 | .2779 | .2067 | .1536 | | .0587 | | -.0206 | | | | | |
| 320.000 | | | .5693 | .3597 | .1893 | .2134 | | -.0316 | | -.1004 | -.0015 | -.1290 | -.1552 | -.2156 | -.0797 |
| 340.000 | | | .6752 | .4137 | .1723 | .2694 | | .0001 | | -.0899 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0317 | .3108 | .4940 | .3090 | -.1780 | -.2344 | -.0927 | | -.0433 | -.0716 |
| 40.000 | -.0015 | .1838 | .2545 | -.0944 | -.2037 | -.0081 | -.1465 | | -.2114 | -.1174 |
| 70.000 | .0159 | -.0575 | -.0496 | -.0673 | .4337 | .0254 | -.0119 | | | |
| 90.000 | .0191 | -.0130 | -.0421 | .0189 | .0690 | .0200 | -.0261 | | | |
| 105.000 | | | -.0350 | .1747 | .0828 | -.0226 | -.0624 | | | |
| 110.000 | | | | | | | | -.1133 | | |
| 120.000 | -.0510 | -.0444 | -.0512 | .1682 | .1308 | .0181 | -.0335 | -.1027 | | |
| 135.000 | | | .1318 | .1573 | .1102 | -.0016 | -.0335 | | | |
| 150.000 | -.0510 | -.0434 | .1502 | .1109 | -.0738 | .0184 | .0844 | | | |
| 165.000 | -.0549 | | .1312 | | .3329 | .2995 | -.0485 | | | |
| 180.000 | -.0745 | -.0702 | .1012 | .0857 | | | | | | |
| 320.000 | .0481 | .1725 | .4538 | .2543 | -.0813 | -.1410 | -.1314 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET847)

ALPHA0( 4) = -.076 BETA0 ( 2) = -4.257

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4097 | .8237 | .6797 | .4423 | .1850 | .5092 | | .0331 | | -.0020 | .1224 | -.0473 | -.0218 | -.0532 | -.0209 |
| 20.000 | | | .7037 | .5287 | .2827 | .4476 | | -.1087 | | .0643 | | | | | |
| 40.000 | | | .7509 | .6207 | .5065 | .290 | | .1931 | | -.0427 | .0518 | -.0789 | -.0323 | 0485 | .0040 |
| 55.000 | | | .7367 | .6353 | .6109 | .3540 | | .2988 | | .1580 | | | | | |
| 70.000 | | | .6962 | .5720 | .5581 | .7989 | | .2783 | | .1965 | -.0029 | -.0156 | -.0272 | -.0633 | |
| 90.000 | | .8262 | .6785 | .5236 | .4841 | .4204 | | .3031 | | .0000 | .0323 | -.0142 | -.0506 | -.0747 | |
| 120.000 | | | .6608 | .5043 | .4021 | .4154 | | .4354 | | .3671 | .0799 | -.1169 | -.1152 | -.0845 | |
| 140.000 | | | | | | | | | | .3492 | | | | | |
| 150.000 | | | .5878 | .4278 | .3743 | .3607 | | | | .1738 | -.1396 | -.1225 | -.0956 | -.0532 | |
| 151.000 | | | | | | | | | .9266 | | | | | | |
| 156.000 | | | | | | | | 1.0403 | | | | | | | |
| 162.000 | | | | | | | | | 1.0176 | | | | | | |
| 165.000 | | | | | | | | | | .0371 | -.1303 | -.1181 | -.0870 | -.0499 | |
| 169.000 | | | | | | | | 1.0970 | | | | | | | |
| 174.000 | | | | | | | .9004 | | | | | | | | |
| 180.000 | 1.4097 | .8098 | .4801 | .3841 | .3409 | .3175 | | 1.0661 | | -.0604 | -.1610 | -.0851 | -.0677 | -.0548 | |
| 305.000 | | | .4854 | .3144 | .2469 | .1574 | | .0946 | | -.0077 | | | | | |
| 320.000 | | | .6040 | .3904 | .2028 | .2492 | | -.0115 | | -.0639 | .0326 | -.1159 | -.1421 | -.0884 | -.0493 |
| 340.000 | | | .6827 | .4021 | .2022 | .2747 | | -.0004 | | -.0843 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0498 | .2396 | .5026 | .3318 | -.1494 | -.2390 | -.1238 | | -.0254 | -.1022 |
| 40.000 | .0353 | .1134 | .2813 | -.0322 | -.1940 | -.0404 | -.1593 | | -.1828 | -.1169 |
| 70.000 | -.0125 | -.0725 | -.0730 | -.0516 | .4505 | -.0042 | -.0305 | | | |
| 90.000 | -.0009 | -.0286 | -.0613 | .0876 | .0217 | -.0103 | -.0408 | | | |
| 105.000 | | | -.0484 | .1278 | .0292 | -.0585 | -.0795 | | | |
| 110.000 | | | | | | | | -.1257 | | |
| 120.000 | -.0299 | -.0254 | -.0085 | .1595 | .1310 | -.0031 | -.0624 | -.1228 | | |
| 135.000 | | | .1259 | .1740 | .1136 | -.0076 | -.0476 | | | |
| 150.000 | -.0480 | -.0387 | .1537 | .1546 | -.0427 | .0715 | .1151 | | | |
| 165.000 | -.0509 | | .1414 | | .3118 | .2554 | -.0699 | | | |
| 180.000 | -.0632 | -.0581 | .1181 | .1520 | | | | | | |
| 320.000 | -.0012 | .1019 | .4615 | .2704 | -.1235 | -.1534 | -.1628 | | | |

BEST AVAILABLE COPY

ARC97-019 IAB1 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET847)

ALPHAO( 4) = -.074 BETAO ( 3) = -2.080

SECTION ( 1:ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4012 | .8816 | .6902 | .4561 | .2124 | .4377 | | -.0046 | | -.0728 | .1623 | -.0842 | -.0824 | -.0479 | .0117 |
| 20.000 | | | .7113 | .4873 | .2245 | .4377 | | -.0888 | | .0096 | | | | | |
| 40.000 | | | .7286 | .5442 | .3733 | .2835 | | .1544 | | -.0750 | .0344 | -.0883 | -.0489 | .0390 | -.0348 |
| 55.000 | | | .6965 | .5473 | .4652 | .3173 | | .2648 | | .1254 | | | | | |
| 70.000 | | | .6575 | .5031 | .4337 | .3546 | | .2519 | | .1654 | -.0316 | -.0498 | -.0505 | -.0890 | |
| 90.000 | | .7513 | .6380 | .4725 | .3929 | .378 | | .2714 | | .0000 | .0025 | -.0410 | -.0773 | -.0944 | |
| 120.000 | | | .6251 | .4772 | .3532 | .3752 | | .4809 | | .3221 | .0402 | -.1343 | -.1153 | -.0761 | |
| 140.000 | | | | | | | | | | .2915 | | | | | |
| 150.000 | | | .5694 | .4305 | .3708 | .3399 | | | | .1317 | -.1408 | -.1172 | -.0930 | -.0509 | |
| 151.000 | | | | | | | | | .8580 | | | | | | |
| 156.000 | | | | | | | | .9216 | | | | | | | |
| 162.000 | | | | | | | | | 1.0006 | | | | | | |
| 165.000 | | | | | | | | | | .0354 | -.1493 | -.0846 | -.0625 | -.0483 | |
| 169.000 | | | | | | | | 1.0849 | | | | | | | |
| 174.000 | | | | | | | .8985 | | | | | | | | |
| 180.000 | 1.4012 | .8048 | .4885 | .4018 | .3581 | .3269 | | 1.1038 | | -.0845 | -.1489 | -.0767 | -.0400 | -.0467 | |
| 305.000 | | | .5549 | .4119 | .3074 | .2095 | | .1260 | | .0246 | | | | | |
| 320.000 | | | .6411 | .4974 | .2490 | .2497 | | .0052 | | -.0277 | .0708 | -.1036 | -.1226 | -.0751 | -.0209 |
| 340.000 | | | .6945 | .4785 | .2012 | .2383 | | .0244 | | -.0587 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0269 | .1676 | .4501 | .3024 | -.1631 | -.1973 | -.1238 | | -.0480 | -.1098 |
| 40.000 | .0095 | .1192 | .2837 | -.0029 | -.1598 | -.0628 | -.1519 | | -.1448 | -.1133 |
| 70.000 | -.0286 | -.0872 | -.0932 | -.0026 | .4664 | -.0158 | -.0391 | | | |
| 90.000 | -.0193 | -.0654 | -.0573 | .0763 | .0029 | -.0271 | -.0423 | | | |
| 105.000 | | | -.0515 | .1132 | -.0074 | -.0797 | -.0939 | | | |
| 110.000 | | | | | | | | -.1322 | | |
| 120.000 | -.0299 | -.0130 | .1148 | .1543 | .1237 | -.0101 | -.0745 | -.1342 | | |
| 135.000 | | | .1624 | .1983 | .1417 | -.0010 | -.0091 | | | |
| 150.000 | -.0535 | -.033 | .1523 | .1931 | .0300 | .1186 | .0825 | | | |
| 165.000 | -.0541 | | .1151 | | .2880 | .2179 | -.0845 | | | |
| 180.000 | -.0567 | -.0547 | .0233 | .2544 | | | | | | |
| 320.000 | .0072 | .2054 | .3497 | .2732 | -.1217 | -.1422 | -.1951 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET847)

ALPHAO( 4) = -.070 BETAO ( 4) = .011

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1880 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4336 | .9945 | .6756 | .4424 | .1852 | .2482 | | .0049 | | .0721 | .1262 | -.0652 | -.1102 | -.0267 | .0073 |
| 20.000 | | | .6457 | .4702 | .1568 | .2749 | | -.0364 | | -.0364 | | | | | |
| 40.000 | | | .6278 | .5123 | .2993 | .2408 | | .1330 | | -.0979 | .0314 | -.0365 | -.0630 | .0078 | .0305 |
| 55.000 | | | .5794 | .4579 | .3709 | .2526 | | .2494 | | .0936 | | | | | |
| 70.000 | | | .5605 | .4117 | .3482 | .3001 | | .2210 | | .1478 | -.0461 | -.0684 | -.0719 | -.1092 | |
| 90.000 | | .6791 | .5617 | .3791 | .3128 | .3017 | | .2308 | | .0000 | -.0053 | -.0634 | -.1054 | -.1042 | |
| 120.000 | | | .5665 | .4199 | .3084 | .2947 | | .4608 | | .2895 | .0164 | -.1548 | -.1178 | -.0706 | |
| 140.000 | | | | | | | | | | .2541 | | | | | |
| 150.000 | | | .5369 | .4123 | .3521 | .3062 | | | | .0949 | -.1373 | -.1146 | -.0700 | -.0514 | |
| 151.000 | | | | | | | | | .7995 | | | | | | |
| 156.000 | | | | | | | | .8552 | | | | | | | |
| 162.000 | | | | | | | | | .9609 | | | | | | |
| 165.000 | | | | | | | | | | .0333 | -.1530 | -.0709 | -.0463 | -.0449 | |
| 169.000 | | | | | | | | 1.0865 | | | | | | | |
| 174.000 | | | | | | | .8635 | | | | | | | | |
| 180.000 | 1.4336 | .7951 | .4932 | .4060 | .3664 | .3170 | | 1.1201 | | -.0901 | -.1383 | -.0555 | -.0371 | -.0436 | |
| 305.000 | | | .6432 | .4395 | .2973 | .2918 | | .1762 | | .0796 | | | | | |
| 320.000 | | | .7206 | .4655 | .1751 | .3492 | | .0708 | | -.0774 | .1131 | -.1035 | -.0798 | -.0439 | -.0394 |
| 340.000 | | | .7313 | .4237 | .1783 | .2029 | | .0011 | | .0611 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0256 | .2069 | .3455 | .3025 | -.1669 | -.1336 | -.1312 | | -.0950 | -.1040 |
| 40.000 | -.0652 | .1617 | .2640 | .0332 | -.2017 | -.1019 | -.1744 | | -.0771 | -.1268 |
| 70.000 | -.0311 | -.0833 | -.0816 | .0312 | .2812 | -.0192 | -.0517 | | | |
| 90.000 | -.0211 | -.0427 | -.0683 | .0759 | .0014 | -.0247 | -.0398 | | | |
| 105.000 | | | -.0202 | .1240 | -.0257 | -.0871 | -.1006 | | | |
| 110.000 | | | | | | | | -.1322 | | |
| 120.000 | -.0369 | -.0134 | .1231 | .1352 | .1387 | -.0153 | -.0916 | -.1435 | | |
| 135.000 | | | .1231 | .2159 | .1255 | .0053 | -.0169 | | | |
| 150.000 | -.0585 | -.0438 | .0917 | .2205 | .0993 | .0885 | .0794 | | | |
| 165.000 | -.0565 | | .0274 | | .2847 | .1725 | -.1248 | | | |
| 180.000 | -.0527 | -.0551 | .0093 | .2873 | | | | | | |
| 320.000 | -.0094 | .1757 | .4068 | .1384 | -.1400 | -.1425 | -.1925 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET847)

ALPHAO( 4) = -.060 BETAO ( 5) = 2.115

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4541 | .7895 | .6657 | .4459 | .1806 | .5215 | | -.0216 | | -.0467 | .1419 | -.0762 | -.1278 | -.0296 | 0132 |
| 20.000 | | | .6462 | .4642 | .1854 | .2210 | | -.0028 | | -.0791 | | | | | |
| 40.000 | | | .6091 | .4866 | .2434 | .2689 | | .0451 | | -.0760 | .0338 | -.0482 | -.0921 | -.0122 | .0412 |
| 55.000 | | | .5512 | .4393 | .3110 | .2092 | | .1614 | | .0419 | | | | | |
| 70.000 | | | .4811 | .3815 | .3090 | .1869 | | .1971 | | .1041 | -.0756 | -.0944 | -.0905 | -.1227 | |
| 90.000 | | .5806 | .4582 | .3463 | .2743 | .1914 | | .2283 | | .0000 | -.0392 | -.0940 | -.1221 | -.1072 | |
| 120.000 | | | .4836 | .3642 | .2625 | .2449 | | .3862 | | .2449 | -.0124 | -.1818 | -.1192 | -.0788 | |
| 140.000 | | | | | | | | | | .1059 | | | | | |
| 150.000 | | | .4830 | .3749 | .3164 | .2752 | | | | .0606 | -.1432 | -.0945 | -.0675 | -.0590 | |
| 151.000 | | | | | | | | | .7181 | | | | | | |
| 156.000 | | | | | | | | .9137 | | | | | | | |
| 162.000 | | | | | | | | | .8725 | | | | | | |
| 165.000 | | | | | | | | | | .0118 | -.1553 | -.0697 | -.0466 | -.0487 | |
| 169.000 | | | | | | | | 1.0068 | | | | | | | |
| 174.000 | | | | | | | .8632 | | | | | | | | |
| 180.000 | 1.4541 | .7757 | .4717 | .3872 | .3412 | .3030 | | 1.0911 | | -.0887 | -.1422 | -.0728 | -.0435 | -.0458 | |
| 305.000 | | | .6081 | .4930 | .5171 | .3221 | | .2267 | | .1167 | | | | | |
| 320.000 | | | .6580 | .5198 | .4096 | .3116 | | .1003 | | -.0740 | .1087 | -.1025 | -.0873 | -.0139 | -.0625 |
| 340.000 | | | .6943 | .4712 | .2309 | .5354 | | -.1365 | | .0300 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0802 | .1877 | .3674 | .2687 | -.1337 | -.1434 | -.1309 | | -.1083 | -.11[illegible] |
| 40.000 | -.0387 | .0991 | .3729 | .1179 | -.2160 | -.1363 | -.1986 | | -.1038 | -.1179 |
| 70.000 | -.0236 | -.0715 | -.0773 | .0185 | .2312 | -.0284 | -.0651 | | | |
| 90.000 | -.0171 | -.0306 | -.0624 | .0768 | -.0136 | -.0313 | -.0509 | | | |
| 105.000 | | | -.0242 | .0985 | -.0526 | -.1027 | -.1180 | | | |
| 110.000 | | | | | | | | -.1470 | | |
| 120.000 | -.0500 | -.0138 | .0668 | .1301 | .1108 | -.0396 | -.1128 | -.1673 | | |
| 135.000 | | | .1334 | .2183 | .1001 | .0094 | -.0277 | | | |
| 150.000 | -.0609 | -.0548 | .1276 | .2163 | .1046 | .0497 | .0349 | | | |
| 165.000 | -.0590 | | .0800 | | .2305 | .1233 | -.1367 | | | |
| 180.000 | -.0580 | -.0575 | .1098 | .2593 | | | | | | |
| 320.000 | -.0218 | .1868 | .3435 | .0333 | -.1857 | -.1399 | -.1641 | | | |

ARC97-019 IA81 LVAP(ALL HL SEALED) ORB. FUSELAGE (RET847)

ALPHA0( 4) = -.050 BETA0 ( 6) = 3.551

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1590 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.4251 | .7828 | .6598 | .5212 | .1702 | .4530 | | -.0011 | | -.0093 | .0476 | -.0811 | -.1681 | -.0112 | -.0524 |
| 20.000 | | | .6102 | .4840 | .1530 | .2467 | | .0062 | | -.1214 | | | | | |
| 40.000 | | | .5288 | .4663 | .2050 | .2375 | | .0134 | | -.0782 | .0317 | -.0661 | -.0955 | -.0086 | -.0150 |
| 55.000 | | | .4161 | .3914 | .2554 | .1527 | | .1318 | | .0137 | | | | | |
| 70.000 | | | .3642 | .3326 | .2539 | .1011 | | .1913 | | .0877 | -.0903 | -.1142 | -.1021 | -.1150 | |
| 90.000 | | .5260 | .3721 | .2745 | .2222 | .1505 | | .1790 | | .0000 | -.0495 | -.1128 | -.1356 | -.0999 | |
| 120.000 | | | .4195 | .2975 | .2091 | .2043 | | .3482 | | .1760 | -.0288 | -.1883 | -.1153 | -.0860 | |
| 140.000 | | | | | | | | | | .0651 | | | | | |
| 150.000 | | | .4365 | .3441 | .2910 | .2403 | | | | .0043 | -.1744 | -.0929 | -.0636 | -.0563 | |
| 151.000 | | | | | | | | | .6350 | | | | | | |
| 156.000 | | | | | | | | .7836 | | | | | | | |
| 162.000 | | | | | | | | | .8700 | | | | | | |
| 165.000 | | | | | | | | | | -.0282 | -.1508 | -.0907 | -.0468 | -.0511 | |
| 169.000 | | | | | | | | 1.0557 | | | | | | | |
| 174.000 | | | | | | | .8897 | | | | | | | | |
| 180.000 | 1.4251 | .7767 | .4654 | .3740 | .3397 | .3082 | | 1.0852 | | -.0833 | -.1610 | -.0844 | -.0636 | -.0514 | |
| 305.000 | | | .6705 | .6463 | .5988 | .3752 | | .2508 | | .1419 | | | | | |
| 320.000 | | | .6928 | .6590 | .4813 | .3164 | | .1548 | | -.0483 | .1231 | -.0920 | -.0825 | -.0009 | -.0170 |
| 340.000 | | | .6931 | .5756 | .2849 | .3891 | | -.1220 | | .0537 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.0659 | .2402 | .3597 | .3607 | -.1633 | -.1504 | -.1327 | | -.1015 | -.1086 |
| 40.000 | -.0363 | .0684 | .4197 | .0789 | -.2088 | -.1459 | -.1716 | | -.0925 | -.1044 |
| 70.000 | -.0270 | -.0769 | -.0817 | .0150 | .2528 | -.0364 | -.0716 | | | |
| 90.000 | -.0234 | -.0292 | -.0616 | .0721 | -.0313 | -.0413 | -.0610 | | | |
| 105.000 | | | .0159 | .0799 | -.0739 | -.1188 | -.1263 | | | |
| 110.000 | | | | | | | | -.1558 | | |
| 120.000 | -.0895 | -.0290 | .1067 | .0837 | .0656 | -.0620 | -.1301 | -.1835 | | |
| 135.000 | | | .1422 | .1824 | .0707 | -.0221 | -.0453 | | | |
| 150.000 | -.0627 | -.0710 | .1355 | .1653 | .0859 | .0020 | -.0144 | | | |
| 165.000 | -.0605 | | .1293 | | .1427 | .0640 | -.1539 | | | |
| 180.000 | -.0537 | -.0535 | .1358 | .1802 | | | | | | |
| 320.000 | .0014 | .2033 | .3212 | -.0090 | -.1785 | -.1234 | -.1600 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB47)

ALPHAO( 4) = -.026 BETAO ( 7) = 6.169

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3696 | .8619 | .6839 | .4702 | .1360 | .4628 | | -.0163 | | .0176 | .0120 | -.0701 | -.1798 | -.0592 | -.0595 |
| 20.000 | | | .6436 | .3699 | .1554 | .2004 | | -.0637 | | -.0942 | | | | | |
| 40.000 | | | .5428 | .3343 | .1315 | .1752 | | -.0063 | | -.0955 | .0225 | -.0704 | -.1107 | -.0513 | -.0643 |
| 55.000 | | | .4116 | .2925 | .1692 | .1067 | | .0917 | | -.0114 | | | | | |
| 70.000 | | | .3670 | .2762 | .1825 | .0793 | | .1764 | | .0800 | -.0977 | -.1251 | -.1085 | -.1148 | |
| 90.000 | | .4515 | .3432 | .2549 | .1784 | .1016 | | .1062 | | .0000 | -.0593 | -.1252 | -.1473 | -.1015 | |
| 120.000 | | | .3661 | .2715 | .1851 | .1647 | | .3160 | | .1138 | -.0898 | -.1911 | -.1141 | -.1151 | |
| 140.000 | | | | | | | | | | .0012 | | | | | |
| 150.000 | | | .4000 | .3253 | .2747 | .2256 | | | | -.0144 | -.1833 | -.1075 | -.0608 | -.0672 | |
| 151.000 | | | | | | | | | .5723 | | | | | | |
| 156.000 | | | | | | | | .8870 | | | | | | | |
| 162.000 | | | | | | | | | .8128 | | | | | | |
| 165.000 | | | | | | | | | | -.0885 | -.1630 | -.0958 | -.0696 | -.0595 | |
| 169.000 | | | | | | | | 1.0265 | | | | | | | |
| 174.000 | | | | | | | .8636 | | | | | | | | |
| 180.000 | 1.3696 | .7438 | .4594 | .3734 | .3397 | .3113 | | 1.0441 | | -.0710 | -.1630 | -.0971 | -.0835 | -.0547 | |
| 305.000 | | | .8085 | .7262 | .6430 | .4193 | | .2832 | | .1759 | | | | | |
| 320.000 | | | .7880 | .6912 | .4776 | .2686 | | .2032 | | -.0039 | .0966 | -.0857 | -.0665 | .0243 | -.0328 |
| 340.000 | | | .7549 | .5678 | .2364 | .4540 | | -.1002 | | .0868 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | -.1049 | .1525 | .3571 | .3926 | -.1921 | -.1443 | -.1277 | | -.0903 | -.0954 |
| 40.000 | .0127 | .0771 | .4355 | .1340 | -.2005 | -.1430 | -.1329 | | -.0916 | -.1044 |
| 70.000 | -.0353 | -.0879 | -.0923 | .0021 | .2163 | -.0435 | -.0823 | | | |
| 90.000 | -.0344 | -.0466 | -.0622 | .0826 | -.0536 | -.0720 | -.0788 | | | |
| 105.000 | | | .0574 | .0616 | -.0875 | -.1307 | -.1374 | | | |
| 110.000 | | | | | | | | -.1690 | | |
| 120.000 | -.1080 | -.0548 | .0904 | .0275 | .0184 | -.0852 | -.1587 | -.1995 | | |
| 135.000 | | | .1017 | .1208 | .0436 | -.0540 | -.0817 | | | |
| 150.000 | -.0879 | -.0877 | .0920 | .1314 | .0523 | -.0559 | -.0634 | | | |
| 165.000 | -.0843 | | .0920 | | .0875 | .0207 | -.1603 | | | |
| 180.000 | -.0659 | -.0667 | .1130 | .0891 | | | | | | |
| 320.000 | -.0340 | .2016 | .3468 | -.0774 | -.1469 | -.0795 | -.1529 | | | |

ARC97-01B IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RET847)

ALPHA0( 5) = 1.992 BETA0 ( 1) = .010

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3709 | 1.0655 | .7425 | .4024 | .1406 | .1690 | | .0132 | | .0934 | .1178 | -.0755 | -.1243 | -.0204 | -.0071 |
| 20.000 | | | .7274 | .4441 | .1285 | .2027 | | -.0515 | | .0168 | | | | | |
| 40.000 | | | .7010 | .4959 | .2216 | .2540 | | .1220 | | -.1035 | .0127 | -.0318 | -.0763 | -.0141 | .0090 |
| 55.000 | | | .6061 | .4517 | .3361 | .2690 | | .2118 | | .0795 | | | | | |
| 70.000 | | | 5744 | .4053 | .3224 | .2760 | | .1837 | | .1192 | -.0560 | -.0802 | -.0892 | -.0952 | |
| 90.000 | | .6533 | .5559 | .3847 | .2998 | .2734 | | .2108 | | .0000 | -.0264 | -.0731 | -.1145 | -.1094 | |
| 120.000 | | | .5342 | .3961 | .2874 | .2626 | | .4302 | | .2569 | .0048 | -.1644 | -.1404 | -.0924 | |
| 140.000 | | | | | | | | | | .2343 | | | | | |
| 150.000 | | | .4855 | .3711 | .3139 | .2658 | | | | .0828 | -.1516 | -.1363 | -.0908 | -.0712 | |
| 151.000 | | | | | | | | | .7431 | | | | | | |
| 156.000 | | | | | | | | .7815 | | | | | | | |
| 162.000 | | | | | | | | | .9062 | | | | | | |
| 165.000 | | | | | | | | | | .0130 | -.1672 | -.0946 | -.0665 | -.0648 | |
| 169.000 | | | | | | | | .9992 | | | | | | | |
| 174.000 | | | | | | | .7833 | | | | | | | | |
| 180.000 | 1.3709 | .7199 | .4355 | .3629 | .3212 | .2750 | | 1.0303 | | -.1019 | -.1547 | -.0759 | -.0579 | -.0635 | |
| 305.000 | | | .6360 | .3986 | .2623 | .2932 | | .1604 | | .0703 | | | | | |
| 320.000 | | | .7592 | .4198 | .1301 | .3298 | | .0719 | | -.1013 | .0930 | -.1148 | -.0763 | -.0555 | -.0413 |
| 340.000 | | | .7836 | .3705 | .1301 | .1804 | | -.0402 | | .0988 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1249 | 2299 | .3506 | .3154 | -.1650 | -.1254 | -.1221 | | -.0881 | -.0974 |
| 40.000 | -.0352 | .1916 | .2932 | .0719 | -.1941 | -.0886 | -.1919 | | -.1032 | -.1257 |
| 70.000 | -.0480 | -.0939 | -.0850 | .0225 | .1991 | -.0360 | -.0680 | | | |
| 90.000 | -.0413 | -.0542 | -.0621 | .0597 | -.0215 | -.0441 | -.0606 | | | |
| 105.000 | | | .0025 | .0994 | -.0428 | -.0960 | -.1130 | | | |
| 110.000 | | | | | | | | -.1439 | | |
| 120.000 | -.0538 | -.0275 | .1327 | .1355 | .1078 | -.0233 | -.0983 | -.1443 | | |
| 135.000 | | | .1310 | .1859 | .1346 | .0018 | -.0239 | | | |
| 150.000 | -.0667 | -.0501 | .0887 | .2049 | .0643 | .0810 | .0614 | | | |
| 165.000 | -.0690 | | -.0036 | | .2778 | .1521 | -.1272 | | | |
| 180.000 | -.0725 | -.0601 | .0119 | .2707 | | | | | | |
| 320.000 | .0186 | .2169 | .4132 | .1620 | -.1399 | -.1285 | -.1718 | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB47)

ALPHAO( 6) = 3.472 BETAO ( 1) = -4.227

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3163 | .9986 | .7309 | .4046 | .1462 | .3211 | | .0257 | | -.0220 | .1068 | -.0730 | -.0459 | -.0715 | .0013 |
| 20.000 | | | .7714 | .5040 | .1905 | .3112 | | -.1119 | | .0470 | | | | | |
| 40.000 | | | .8170 | .6432 | .4550 | .1897 | | .1829 | | -.0526 | .0140 | -.1024 | .0668 | .0232 | .0033 |
| 55.000 | | | .7777 | .6429 | .5687 | .3147 | | .2602 | | .1243 | | | | | |
| 70.000 | | | .7095 | .5744 | .5166 | .3534 | | .2110 | | .1539 | -.0532 | -.0536 | -.0583 | -.0336 | |
| 90.000 | | .7896 | .6639 | .5214 | .4595 | .3604 | | .2390 | | .0000 | .0003 | - 0396 | -.0797 | -.0554 | |
| 120.000 | | | .6005 | .4554 | .3604 | .3310 | | .3324 | | .3078 | .0389 | -.1277 | -.1524 | -.1315 | |
| 140.000 | | | | | | | | | | .2928 | | | | | |
| 150.000 | | | .5037 | .3473 | .3010 | .2793 | | | | .1397 | -.1773 | -.1656 | -.1381 | -.0940 | |
| 151.000 | | | | | | | | | .8077 | | | | | | |
| 156.000 | | | | | | | | .8719 | | | | | | | |
| 162.000 | | | | | | | | | .8933 | | | | | | |
| 165.000 | | | | | | | | | | -.0121 | -.1639 | -.1596 | -.1170 | -.0911 | |
| 169.000 | | | | | | | | .9499 | | | | | | | |
| 174.000 | | | | | | | .7854 | | | | | | | | |
| 180.000 | 1.3155 | .6856 | .3893 | .2998 | .2640 | .2433 | | .9279 | | -.0944 | -.1913 | -.1281 | -.0924 | -.0908 | |
| 305.000 | | | .4905 | .2982 | .1948 | .1291 | | .0593 | | -.0303 | | | | | |
| 320.000 | | | .6353 | .3721 | .1319 | .2114 | | -.0391 | | -.0825 | .0115 | -.1388 | -.1549 | -.0231 | .0500 |
| 340.000 | | | .7202 | .3548 | .1511 | .1734 | | -.0025 | | -.0781 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0951 | .3117 | .5465 | .4904 | -.1095 | -.1941 | -.1210 | | -.0311 | -.0941 |
| 40.000 | .1431 | .1754 | .3632 | .0131 | -.1682 | -.1182 | -.1677 | | -.2037 | -.1249 |
| 70.000 | -.0444 | -.1002 | -.1101 | -.1137 | .3109 | -.0388 | -.0658 | | | |
| 90.000 | -.0405 | -.0615 | -.0946 | -.0380 | .0116 | -.0281 | -.0720 | | | |
| 105.000 | | | -.0891 | .1001 | .0407 | -.0636 | -.1064 | | | |
| 110.000 | | | | | | | | -.1477 | | |
| 120.000 | -.1031 | -.1017 | -.0597 | .0998 | .0998 | -.0255 | -.0745 | -.1268 | | |
| 135.000 | | | .0952 | .0930 | .0462 | -.0455 | -.0942 | | | |
| 150.000 | -.0757 | -.0697 | .0997 | .0814 | -.1030 | -.0455 | .0270 | | | |
| 165.000 | -.0750 | | .0942 | | .1785 | .1440 | -.1071 | | | |
| 180.000 | -.0808 | -.0797 | .0994 | .0946 | | | | | | |
| 320.000 | .0104 | .2300 | .5901 | .3915 | -.0962 | -.1200 | -.1571 | | | |

ARCS7-019 !A81 LVAP(ALLHL SEALED) ORB. FUSELAGE (RETB47)

ALPHA0( 6) = 3.475 BETA0 ( 2) = .017

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3521 | 1.1293 | .7932 | .3604 | .1000 | .1604 | | -.0015 | | .0864 | .1177 | -.0867 | -.1316 | .0137 | .0531 |
| 20.000 | | | .7944 | .4123 | .1051 | .1432 | | -.0461 | | .0550 | | | | | |
| 40.000 | | | .7825 | .4942 | .1799 | .2134 | | .1038 | | -.1172 | -.0108 | -.0743 | -.0683 | .0355 | .0563 |
| 55.000 | | | .6418 | .4755 | .3217 | .2255 | | .1802 | | .0631 | | | | | |
| 70.000 | | | .5807 | .4044 | .3115 | .2488 | | .1619 | | .0896 | -.0794 | -.0979 | -.1069 | -.0968 | |
| 90.000 | | .6418 | .5552 | .3908 | .2949 | .2580 | | .1874 | | .0000 | -.0437 | -.0838 | -.1288 | -.1073 | |
| 120.000 | | | .5140 | .3715 | .2657 | .2338 | | .3799 | | .2220 | -.0102 | -.1715 | -.1611 | -.1164 | |
| 140.000 | | | | | | | | | | .2067 | | | | | |
| 150.000 | | | .4501 | .3297 | .2743 | .2341 | | | | .0589 | -.1693 | -.1570 | -.1107 | -.0927 | |
| 151.000 | | | | | | | | | .6785 | | | | | | |
| 156.000 | | | | | | | | .7191 | | | | | | | |
| 162.000 | | | | | | | | | .8347 | | | | | | |
| 165.000 | | | | | | | | | | -.0073 | -.1792 | -.1190 | -.0908 | -.0843 | |
| 169.000 | | | | | | | | .9008 | | | | | | | |
| 174.000 | | | | | | | .7050 | | | | | | | | |
| 180.000 | 1.3521 | .6468 | .3903 | .3208 | .2794 | .2392 | | .9449 | | -.1129 | -.1671 | -.0943 | -.0835 | -.0824 | |
| 305.000 | | | .6179 | .3810 | .3014 | .2963 | | .1540 | | .0520 | | | | | |
| 320.000 | | | .7893 | .3900 | .1308 | .2909 | | .0509 | | -.1126 | .0555 | -.1244 | -.0651 | -.0382 | -.0085 |
| 340.000 | | | .8263 | .3227 | .0580 | .2370 | | -.0869 | | .0695 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1746 | .2739 | .3800 | .3432 | -.1466 | -.1201 | -.1305 | | -.0909 | -.0995 |
| 40.000 | -.0121 | .2227 | .3467 | .1155 | -.1815 | -.1026 | -.1854 | | -.1204 | -.1256 |
| 70.000 | -.0640 | -.1099 | -.1103 | -.0523 | .1463 | -.0522 | -.0760 | | | |
| 90.000 | -.0475 | -.0614 | -.0827 | .0569 | -.0057 | -.0677 | -.0992 | | | |
| 105.000 | | | .0293 | .1015 | -.0232 | -.0897 | -.1199 | | | |
| 110.000 | | | | | | | | -.1615 | | |
| 120.000 | -.0608 | -.0419 | .1077 | .1041 | .0679 | -.0399 | -.0970 | -.1409 | | |
| 135.000 | | | .1054 | .1426 | .0912 | -.0086 | -.0263 | | | |
| 150.000 | -.0727 | -.0546 | .0899 | .1801 | .0847 | .0656 | .0328 | | | |
| 165.000 | -.0750 | | .0160 | | .2544 | .1318 | -.1125 | | | |
| 180.000 | -.0869 | -.0627 | -.0287 | .2670 | | | | | | |
| 320.000 | .0240 | .2887 | .4609 | .2292 | -.1333 | -.1128 | -.1651 | | | |

ARC97-019 !AB1 LVAP(ALLHL SEALED) OR3. FUSELAGE (RETB47)

ALPHAO( 6) = 3.480 BETAO ( 3) = 3.492

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | .1580 | .1660 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.2705 | 1.0094 | .7411 | .3803 | .0947 | .3106 | | -.0327 | | -.0250 | .0347 | -.1059 | -.1739 | -.0379 | .0737 |
| 20.000 | | | .6961 | .3438 | .0943 | .1373 | | -.0285 | | -.1412 | | | | | |
| 40.000 | | | .5985 | .3743 | .1122 | .1897 | | -.0156 | | -.1257 | .0098 | -.0731 | -.1122 | -.0079 | .0067 |
| 55.000 | | | .4774 | .3234 | .1766 | .1191 | | .0895 | | -.0175 | | | | | |
| 70.000 | | | .4352 | .2915 | .1913 | .0556 | | .1359 | | .0400 | -.1177 | -.1375 | -.1198 | -.1385 | |
| 90.000 | | .4674 | .4126 | .2787 | .1846 | .0971 | | .1527 | | .0000 | -.0788 | -.1337 | -.1524 | -.1283 | |
| 120.000 | | | .3761 | .2841 | .1820 | .1558 | | .2622 | | .1770 | -.0565 | -.2074 | -.1505 | -.1106 | |
| 140.000 | | | | | | | | | | .0341 | | | | | |
| 150.000 | | | .3501 | .2822 | .2324 | .1855 | | | | -.0249 | -.2010 | -.1296 | -.1040 | -.0868 | |
| 151.000 | | | | | | | | | .5503 | | | | | | |
| 156.000 | | | | | | | | .7024 | | | | | | | |
| 162.000 | | | | | | | | | .7556 | | | | | | |
| 165.000 | | | | | | | | | | -.0705 | -.1908 | -.1192 | -.0891 | -.0839 | |
| 169.000 | | | | | | | | .9219 | | | | | | | |
| 174.000 | | | | | | | .7983 | | | | | | | | |
| 180.000 | 1.2705 | .6275 | .3667 | .3007 | .2666 | .2343 | | .9345 | | -.1171 | -.1908 | -.1290 | -.0986 | -.0890 | |
| 305.000 | | | .7577 | .6121 | .5033 | .3559 | | .2174 | | .1106 | | | | | |
| 320.000 | | | .8224 | .6241 | .3368 | .2107 | | .1461 | | -.0514 | .0223 | -.1211 | - 0648 | -.0243 | -.0049 |
| 340.000 | | | .8010 | .4719 | .1083 | .3866 | | -.1393 | | .0357 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .0791 | .2569 | .3765 | .3836 | -.1418 | -.1521 | -.1388 | | -.1024 | -.1092 |
| 40.000 | -.0053 | .1490 | .5128 | .1739 | -.1702 | -.1201 | -.1604 | | -.0918 | -.1131 |
| 70.000 | -.0468 | -.1000 | -.1107 | -.0139 | .1356 | -.0700 | -.1004 | | | |
| 90.000 | -.0359 | -.0642 | -.0948 | .0301 | -.0539 | -.0677 | -.0863 | | | |
| 105.000 | | | -.0502 | .0521 | -.1062 | -.1359 | -.1475 | | | |
| 110.000 | | | | | | | | -.1762 | | |
| 120.000 | -.0697 | -.0282 | .0703 | .0816 | .0519 | -.0779 | -.1526 | -.1926 | | |
| 135.000 | | | .1265 | .1330 | .0525 | -.0531 | -.0795 | | | |
| 150.000 | -.0874 | -.0725 | .1039 | .0797 | .0147 | -.0289 | -.0457 | | | |
| 165.000 | -.0855 | | .1025 | | .0716 | .0235 | -.1617 | | | |
| 180.000 | -.0774 | -.0566 | .1033 | .1039 | | | | | | |
| 320.000 | .0498 | .2545 | .3659 | .0477 | -.1647 | -.1062 | -.1630 | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) ORB FUSELAGE (RET847)

ALPHAO( T) = 6.220 BETAO ( T) = .042

SECTION ( 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

| X/LB | .0000 | .0080 | .0230 | .0460 | .0700 | .1120 | 1580 | .1680 | .1770 | .2040 | .2510 | .3010 | .3780 | .4970 | .5740 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | | | | | | |
| .000 | 1.3433 | 1.2395 | .8140 | .2487 | .0243 | .2474 | | .0107 | | .0788 | .0990 | -.1020 | -.1352 | .0677 | .1607 |
| 20.000 | | | .8347 | .3042 | -.0127 | .1849 | | -.0784 | | .0609 | | | | | |
| 40.000 | | | .8347 | .4309 | .1737 | .1836 | | .0795 | | -.1289 | -.0353 | -.1093 | -.0673 | .0478 | .1324 |
| 55.000 | | | .7217 | .4590 | .3189 | .2037 | | .1606 | | .0454 | | | | | |
| 70.000 | | | .5574 | .3933 | .3211 | .2299 | | .1357 | | .0722 | -.1045 | -.1195 | -.1248 | -.0907 | |
| 90.000 | | .6239 | .5477 | .3781 | .2854 | .2305 | | .1653 | | .0000 | -.0529 | -.0967 | -.1422 | -.1109 | |
| 120.000 | | | .4904 | .3495 | .2379 | .2219 | | .3210 | | .1967 | -.0289 | -.1735 | -.1786 | -.1356 | |
| 140.000 | | | | | | | | | | .1839 | | | | | |
| 150.000 | | | .4117 | .2924 | .2343 | .2158 | | | | .0518 | -.1846 | -.1725 | -.1245 | -.1104 | |
| 151.000 | | | | | | | | | .6300 | | | | | | |
| 156.000 | | | | | | | | .6841 | | | | | | | |
| 162.000 | | | | | | | | | .7635 | | | | | | |
| 165.000 | | | | | | | | | | -.0276 | -.1894 | -.1334 | -.1096 | -.1040 | |
| 169.000 | | | | | | | | .8268 | | | | | | | |
| 174.000 | | | | | | | .6484 | | | | | | | | |
| 180.000 | 1.3433 | .5936 | .3463 | .2831 | .2382 | .2171 | | .8639 | | -.1227 | -.1818 | -.1084 | -.1027 | -.0991 | |
| 305.000 | | | .6251 | .3721 | .2940 | .2605 | | .1331 | | .0352 | | | | | |
| 320.000 | | | .8220 | .3403 | .1597 | .2426 | | .0559 | | -.1269 | .0196 | -.1375 | -.0742 | -.0169 | .0402 |
| 340.000 | | | .8448 | .2397 | -.0129 | .3183 | | -.1349 | | .0524 | | | | | |

| X/LB | .6520 | .7290 | .7790 | .8210 | .8790 | .9210 | .9600 | .9990 | 1.0140 | 1.0450 |
|---|---|---|---|---|---|---|---|---|---|---|
| PHI | | | | | | | | | | |
| .000 | .1788 | .3129 | .4071 | .3584 | -.1475 | -.1033 | -.1533 | | -.0816 | -.0938 |
| 40.000 | .0305 | .2701 | .4003 | .1525 | -.1824 | -.1353 | -.1845 | | -.1173 | -.1112 |
| 70.000 | -.0746 | -.1201 | -.1240 | -.1195 | .1901 | -.0613 | -.0854 | | | |
| 90.000 | -.0582 | -.0724 | -.0952 | .0315 | -.0076 | -.0580 | -.0982 | | | |
| 105.000 | | | -.0548 | .0978 | -.0030 | -.1004 | -.1353 | | | |
| 110.000 | | | | | | | | -.1723 | | |
| 120.000 | -.0746 | -.0445 | .0629 | .0993 | .0321 | -.0690 | -.0973 | -.1404 | | |
| 135.000 | | | .0690 | .1122 | .0305 | -.0098 | -.0268 | | | |
| 150.000 | -.0779 | -.0419 | .0765 | .1158 | .0831 | .0463 | .0096 | | | |
| 165.000 | -.0811 | | .0674 | | .2230 | .1051 | -.1169 | | | |
| 180.000 | -.0949 | -.0587 | .0559 | .2473 | | | | | | |
| 320.000 | .0234 | .3707 | .4353 | .2947 | -.1227 | -.1237 | -.1726 | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (REV130) 12 OCT 74

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.500 RN FT = 3.000
ELV-1B = .000 ELV-0B = .000
RUDDER = .000 SPOBRK = 55.000

BETAO ( 1) = .230 ALPHAO( 1) = -6.391

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0586 | -.0263 | .3163 | .6946 | .5900 | .6163 | .3741 | -.0713 | |
| .010 | .0420 | .0020 | .2056 | .1221 | .0477 | .0915 | .1211 | | |
| .020 | .0254 | .0682 | .0070 | .0178 | .0084 | -.0217 | -.0107 | -.0988 | |
| .040 | | .0752 | .1100 | | | | | | |
| .050 | .0465 | | | -.0394 | -.0221 | -.0597 | -.0482 | | |
| .069 | | | | | | | | -.0988 | |
| .080 | | | | -.0459 | | | | | |
| .091 | | | .0220 | | | | | | |
| .085 | | .0782 | | | | | | | |
| .094 | -.0011 | | | | | | | | |
| .150 | | | | -.0507 | -.0496 | -.0164 | -.0605 | | |
| .157 | | | | | | | | -.0982 | |
| .163 | | .1058 | | | | | | | |
| .177 | | | .0124 | | | | | | |
| .229 | .0578 | | | | | | | | |
| .246 | | .0940 | | | | | | | |
| .250 | | | | -.0310 | -.0642 | -.0450 | -.0489 | | |
| .274 | | | -.0357 | | | | | | |
| .345 | | | | | | | | -.0642 | |
| .352 | .0000 | | | | | | | | |
| .390 | | .0214 | | | | | | | |
| .400 | | | | .6152 | -.0648 | | -.0778 | | |
| .402 | | | .1188 | | | | | | |
| .418 | | | | | | | | | -.1216 |
| .497 | -.0058 | | | | | | | | |
| .503 | | | | | | | | -.0695 | |
| .550 | | | | .0229 | .0149 | | | | |
| .565 | | | .0538 | | | | | | |
| .600 | | | | | | | -.0845 | | |
| .637 | | .1228 | | | | | | | |
| .650 | | | | | | -.0258 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0065 | | | | |
| .725 | | | | -.0274 | | | | | |
| .730 | | | | | | | | | -.1386 |
| .750 | | | | | | -.0351 | -.0994 | | |
| .760 | | | .0244 | | | | | | |
| .775 | | | | -.0378 | -.0205 | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL30)

BETAO ( 1) = .230 ALPHAO( 1) = -6.381

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/B. | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .798 | | .0108 | | | | | | | |
| .808 | | | -.0285 | | | | | | |
| .834 | -.0782 | | | | | | | | |
| .839 | | -.0577 | | | | | | | |
| .850 | | | | .0802 | -.0041 | -.0518 | | | |
| .857 | | | -.0736 | | | | | | |
| .862 | | | | | | | | -.0748 | |
| .865 | -.0979 | | | | | | | | |
| .879 | | -.0996 | | | | | | | |
| .900 | -.1235 | | | .0315 | | | -.1320 | | |
| .905 | | | -.0910 | | | | | | |
| .919 | | -.1235 | | | | | | | |
| .950 | | | | -.0287 | -.0303 | -.0462 | | | |
| .953 | | | -.1033 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0494 | | | | | | | | |
| 1.000 | | | -.0970 | | -.0725 | | -.1084 | | |

BETAO ( 1) = .215 ALPHAO( 2) = -4.330

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0313 | -.0235 | .3090 | .6593 | .6163 | .6292 | .6572 | -.0271 | |
| .010 | .0203 | -.0388 | .2437 | .1163 | .0767 | .1155 | .1627 | | |
| .020 | .0096 | -.0155 | .0000 | .0304 | .0361 | .0052 | .0239 | -.0490 | |
| .040 | | .0190 | .1240 | | | | | | |
| .050 | .0315 | | | -.0120 | -.0015 | -.0299 | -.0061 | | |
| .069 | | | | | | | | -.0527 | |
| .080 | | | | -.0167 | | | | | |
| .081 | | | .0313 | | | | | | |
| .088 | | .0921 | | | | | | | |
| .094 | -.0224 | | | | | | | | |
| .150 | | | | -.0305 | -.0310 | .0252 | .0317 | | |
| .157 | | | | | | | | -.0480 | |
| .163 | | .1083 | | | | | | | |
| .177 | | | .0242 | | | | | | |
| .229 | -.0435 | | | | | | | | |
| .246 | | .0838 | | | | | | | |
| .250 | | | | -.0193 | -.0484 | -.0082 | -.0183 | | |
| .274 | | | -.0225 | | | | | | |
| .345 | | | | | | | | -.0324 | |
| .362 | .0000 | | | | | | | | |

ARC97-019 1A81 LVAP(ALLHL ' ALED) LEFT WING BOT. (REV L30)

BETA0 ( 1) = .215 ALPHA0( 1) = -4.330

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BM | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/C | | | | | | | | | |
| .390 | | .0112 | | | | | | | |
| .400 | | | | .0000 | -.0519 | | -.0401 | | |
| .402 | | | .1275 | | | | | | |
| .418 | | | | | | | | | -.0696 |
| .497 | -.0678 | | | | | | | | |
| .503 | | | | | | | | -.0380 | |
| .550 | | | | .0451 | .0333 | | | | |
| .565 | | | .0698 | | | | | | |
| .600 | | | | | | | -.0548 | | |
| .637 | | .1195 | | | | | | | |
| .650 | | | | | | -.0275 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .3000 | | | | .0068 | | | | |
| .725 | | | | -.0173 | | | | | |
| .730 | | | | | | | | | -.0927 |
| .750 | | | | | | -.0176 | -.0749 | | |
| .760 | | | .0378 | | | | | | |
| .775 | | | | -.0214 | .0179 | | | | |
| .798 | | .0021 | | | | | | | |
| .809 | | | -.0066 | | | | | | |
| .834 | .1634 | | | | | | | | |
| .839 | | -.0603 | | | | | | | |
| .850 | | | | .1032 | .0156 | -.0360 | | | |
| .857 | | | -.0456 | | | | | | |
| .862 | | | | | | | | -.0557 | |
| .865 | -.0617 | | | | | | | | |
| .879 | | -.0960 | | | | | | | |
| .900 | -.0874 | | | .0484 | | | -.1205 | | |
| .905 | | | -.0472 | | | | | | |
| .919 | | -.1106 | | | | | | | |
| .950 | | | | -.0120 | -.0223 | -.0229 | | | |
| .953 | | | -.0802 | | | | | | |
| .955 | | .0070 | | | | | | | |
| .965 | -.0304 | | | | | | | | |
| 1.000 | | | -.0814 | | -.0795 | | -.1226 | | |

ARC97-019 (AB1 EVAP/ALUM SEALED) LEFT WING BOT. (REV 30)

BETAG ( 1) = .182 ALPHAG( 3) = -.115

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0149 | -.0545 | .2826 | .7263 | .6557 | .6797 | .6710 | .0478 | |
| .010 | -.0171 | -.0697 | .1995 | .1798 | .1242 | .1652 | .2013 | | |
| .020 | -.0006 | -.0542 | .0000 | .0657 | .0323 | .0546 | .0570 | .0331 | |
| .040 | | -.0357 | .0428 | | | | | | |
| .050 | -.0151 | | | .0038 | .0461 | .0207 | .0225 | | |
| .069 | | | | | | | | .0184 | |
| .080 | | | | .0167 | | | | | |
| .081 | | | .0622 | | | | | | |
| .086 | | .0999 | | | | | | | |
| .094 | -.0644 | | | | | | | | |
| .150 | | | | -.0096 | .0021 | .0213 | .0097 | | |
| .157 | | | | | | | | .0122 | |
| .163 | | .0813 | | | | | | | |
| .177 | | | -.0134 | | | | | | |
| .229 | -.0788 | | | | | | | | |
| .246 | | .0602 | | | | | | | |
| .250 | | | | -.0271 | -.0179 | .0014 | .0260 | | |
| .274 | | | -.0265 | | | | | | |
| .345 | | | | | | | | .0122 | |
| .362 | .0000 | | | | | | | | |
| .380 | | .0045 | | | | | | | |
| .400 | | | | .0000 | -.0303 | | .0040 | | |
| .402 | | | .0893 | | | | | | |
| .418 | | | | | | | | | -.0042 |
| .497 | -.0177 | | | | | | | | |
| .500 | | | | | | | | .0013 | |
| .550 | | | | .0740 | -.0034 | | | | |
| .555 | | | .0893 | | | | | | |
| .600 | | | | | | | -.0239 | | |
| .637 | | .1197 | | | | | | | |
| .650 | | | | | | -.0517 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0154 | | | | |
| .725 | | | | .0123 | | | | | |
| .730 | | | | | | | | | -.0408 |
| .750 | | | | | | -.0595 | -.0448 | | |
| .760 | | | .0166 | | | | | | |
| .775 | | | | .0047 | -.0019 | | | | |
| .798 | | -.0120 | | | | | | | |
| .808 | | | - 0253 | | | | | | |
| .834 | -.0859 | | | | | | | | |
| .839 | | -.0694 | | | | | | | |
| .850 | | | | .1079 | .0268 | -.0773 | | | |
| .857 | | | -.0542 | | | | | | |
| .862 | | | | | | | | -.0514 | |

AR697-019 !AB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL30)

BETAO ( 1) = .182 ALPHAO( 3) = -.116

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.1036 | | | | | | | | |
| .879 | | -.1045 | | | | | | | |
| .900 | -.1122 | | | .0649 | | | -.1036 | | |
| .905 | | | -.0518 | | | | | | |
| .919 | | -.0903 | | | | | | | |
| .950 | | | | .0049 | .0031 | -.0998 | | | |
| .953 | | | -.0837 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0372 | | | | | | | | |
| 1.000 | | | -.1075 | | -.0943 | | -.1347 | | |

BETAO ( 1) = .186 ALPHAO( 4) = 4.056

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0480 | .0032 | .2860 | .7528 | .7030 | .7348 | .7325 | .1115 | |
| .010 | -.0414 | .0204 | .2424 | .2538 | .1779 | .2623 | .3243 | | |
| .020 | -.0314 | .0355 | .0000 | .1481 | .1585 | .1684 | .1517 | .1080 | |
| .040 | | .0370 | .1065 | | | | | | |
| .060 | -.0443 | | | .079 | .1023 | .1128 | .1272 | | |
| .069 | | | | | | | | .0901 | |
| .080 | | | | .0548 | | | | | |
| .081 | | | .0499 | | | | | | |
| .086 | | .0922 | | | | | | | |
| .094 | -.0827 | | | | | | | | |
| .150 | | | | .0167 | .0448 | .0757 | .0941 | | |
| .157 | | | | | | | | .0745 | |
| .163 | | .0391 | | | | | | | |
| .177 | | | -.0163 | | | | | | |
| .229 | -.0036 | | | | | | | | |
| .246 | | .0179 | | | | | | | |
| .250 | | | | .0170 | .0275 | .0604 | .0851 | | |
| .274 | | | .0054 | | | | | | |
| .345 | | | | | | | | .0680 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0070 | | | | | | | |
| .400 | | | | .0000 | .0220 | | .0609 | | |
| .402 | | | .0996 | | | | | | |
| .418 | | | | | | | | | .0198 |
| .497 | .0348 | | | | | | | | |
| .503 | | | | | | | | .0498 | |
| .550 | | | | .1231 | .0223 | | | | |

ARC97-019 TAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL30)

BETAO( 1) = .186 ALPHAO( 4) = 4.056

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8970 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .1421 | | | | | | |
| .600 | | | | | | | .0315 | | |
| .637 | | .1641 | | | | | | | |
| .650 | | | | | | .0042 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0834 | | | | |
| .725 | | | | .1951 | | | | | |
| .730 | | | | | | | | | -.0748 |
| .750 | | | | | | -.0209 | .0059 | | |
| .760 | | | .1928 | | | | | | |
| .775 | | | | .2393 | .1585 | | | | |
| .798 | | .0742 | | | | | | | |
| .808 | | | .1534 | | | | | | |
| .834 | -.0607 | | | | | | | | |
| .839 | | .0282 | | | | | | | |
| .850 | | | | .1650 | .1340 | -.0389 | | | |
| .857 | | | .0430 | | | | | | |
| .862 | | | | | | | | -.0365 | |
| .866 | -.0792 | | | | | | | | |
| .879 | | -.0284 | | | | | | | |
| .900 | -.0789 | | | | .0697 | | -.0720 | | |
| .906 | | | -.0445 | | | | | | |
| .919 | | -.0785 | | | | | | | |
| .950 | | | | -.0014 | .0507 | .0273 | | | |
| .953 | | | -.0943 | | | | | | |
| .956 | | .0000 | | | | | | | |
| .966 | -.0283 | | | | | | | | |
| 1.000 | | | -.1382 | | -.1127 | | -.1355 | | |

BETAO ( 1) = .209 ALPHAO( 5) = 8.267

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8970 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0695 | -.0060 | .3216 | .7699 | .6962 | .7507 | .7676 | .1604 | |
| .010 | -.0469 | .0169 | .3223 | .3107 | .3389 | .4211 | .4712 | | |
| .020 | -.0493 | .0135 | .0000 | .2110 | .3269 | .3317 | .3295 | .1949 | |
| .040 | | .0084 | .1767 | | | | | | |
| .050 | -.0484 | | | .1475 | .1910 | .2389 | .2702 | | |
| .070 | | | | | | | | .1841 | |
| .090 | | | | .1187 | | | | | |
| .081 | | | .0889 | | | | | | |
| .085 | | .0611 | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL30)

BETAO ( 11 = .209 ALPHAO( 51 = 8.267

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0118 | | | | | | | | |
| .150 | | | | .0577 | .1252 | .1729 | .2236 | | |
| .157 | | | | | | | | .1715 | |
| .163 | | .0980 | | | | | | | |
| .177 | | | .0015 | | | | | | |
| .229 | -.0139 | | | | | | | | |
| .246 | | .0419 | | | | | | | |
| .250 | | | | .0462 | .1000 | .1587 | .1999 | | |
| .274 | | | .0124 | | | | | | |
| .345 | | | | | | | | .1528 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0576 | | | | | | | |
| .400 | | | | .0000 | .0905 | | .1718 | | |
| .402 | | | .1028 | | | | | | |
| .418 | | | | | | | | | -.0507 |
| .497 | .0708 | | | | | | | | |
| .503 | | | | | | | | .1314 | |
| .550 | | | | .2549 | .1093 | | | | |
| .555 | | | .2239 | | | | | | |
| .600 | | | | | | | .1325 | | |
| .637 | | .2148 | | | | | | | |
| .650 | | | | | | .1012 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3034 | | | | |
| .725 | | | | .3078 | | | | | |
| .730 | | | | | | | | | -.1660 |
| .750 | | | | | | .2012 | .1021 | | |
| .760 | | | .2366 | | | | | | |
| .775 | | | | .2685 | .2846 | | | | |
| .799 | | .1343 | | | | | | | |
| .809 | | | .1477 | | | | | | |
| .834 | -.0265 | | | | | | | | |
| .839 | | .0404 | | | | | | | |
| .850 | | | | .1328 | .1926 | .2718 | | | |
| .857 | | | .0349 | | | | | | |
| .862 | | | | | | | | -.0011 | |
| .955 | -.0422 | | | | | | | | |
| .879 | | -.0342 | | | | | | | |
| .900 | -.0796 | | | .0556 | | | .0242 | | |
| .905 | | | -.0484 | | | | | | |
| .919 | | -.0867 | | | | | | | |
| .950 | | | | .0014 | .0685 | .1658 | | | |
| .953 | | | -.0948 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0393 | | | | | | | | |

ARC97-019 TAB1 LVAP(ALLHL SCALED) LEFT WING BOT. (RETL30)

BETAO ( 1) = .209 ALPHAO( 5) = 8.267

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1486 | | -.1414 | | -.1034 | | |

BETAO ( 1) = .218 ALPHAO( 6) = 10.355

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0813 | -.0299 | .3329 | .7438 | .7809 | .8130 | .8011 | .1570 | |
| .010 | -.0770 | -.0011 | .3269 | .3398 | .4020 | .5093 | .5857 | | |
| .020 | -.0547 | .0119 | .0000 | .2446 | .3898 | .4123 | .4502 | .2306 | |
| .040 | | .0154 | .1675 | | | | | | |
| .050 | .0018 | | | .1628 | .2359 | .3032 | .3770 | | |
| .059 | | | | | | | | .2309 | |
| .080 | | | | .1223 | | | | | |
| .081 | | | .0683 | | | | | | |
| .089 | | .0672 | | | | | | | |
| .094 | -.0395 | | | | | | | | |
| .150 | | | | .0696 | .1614 | .2380 | .3182 | | |
| .157 | | | | | | | | .2253 | |
| .163 | | .1140 | | | | | | | |
| .177 | | | -.0235 | | | | | | |
| .239 | -.0315 | | | | | | | | |
| .246 | | .0226 | | | | | | | |
| .250 | | | | .0553 | .1274 | .2274 | .2814 | | |
| .274 | | | -.0055 | | | | | | |
| .345 | | | | | | | | .2028 | |
| .382 | .0000 | | | | | | | | |
| .390 | | .0711 | | | | | | | |
| .400 | | | | .0000 | .1196 | | .2402 | | |
| .402 | | | .0722 | | | | | | |
| .418 | | | | | | | | | -.0883 |
| .497 | .0389 | | | | | | | | |
| .503 | | | | | | | | .1768 | |
| .550 | | | | .3384 | .2074 | | | | |
| .565 | | | .2835 | | | | | | |
| .600 | | | | | | | .1725 | | |
| .637 | | .2675 | | | | | | | |
| .650 | | | | | | .3065 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3769 | | | | |
| .725 | | | | .2808 | | | | | |
| .730 | | | | | | | | | -.1779 |
| .750 | | | | | | .2950 | .3255 | | |

DATE 08 OCT 75 TAB1B - PRESSURE SOURCE DATA TABULATION

ARC97-019 TAB1 LVAR(ALLHL SEALED) LEFT WING BOT.

BETAO ( 1) = .218 ALPHAO( 6) = 10.355

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .1891 | | | | | | |
| .775 | | | | .2477 | .2534 | | | | |
| .798 | | .1368 | | | | | | | |
| .808 | | | .0987 | | | | | | |
| .834 | -.0329 | | | | | | | | |
| .839 | | .0223 | | | | | | | |
| .850 | | | | .0939 | .1392 | .2271 | | | |
| .857 | | | .0069 | | | | | | |
| .862 | | | | | | | | .1300 | |
| .865 | -.0458 | | | | | | | | |
| .879 | | -.0521 | | | | | | | |
| .900 | -.0913 | | | .0331 | | | .1316 | | |
| .905 | | | -.0630 | | | | | | |
| .919 | | -.0977 | | | | | | | |
| .950 | | | | -.0222 | .0465 | .1263 | | | |
| .953 | | | -.1041 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0479 | | | | | | | | |
| 1.000 | | | -.1557 | | -.1415 | | -.1014 | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT (RETL31) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.200 RN/FT = 3.000
ELV-IB = .000 ELV-OB = .000
RUDDER = .000 SPOIL = 55.000

BETAO ( 1) = -.117 ALPHAO( 1) = -6.403

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/B4 | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CV | | | | | | | | | |
| .000 | .0380 | .0611 | .2955 | .6583 | .6079 | .5655 | .5742 | -.1192 | |
| .010 | .0121 | .0523 | .1727 | .0543 | .0063 | .0374 | .0375 | | |
| .020 | .0091 | .0649 | .0000 | -.0409 | -.0392 | -.0759 | -.0974 | -.1650 | |
| .040 | | .0658 | .0812 | | | | | | |
| .050 | .0058 | | | -.0713 | -.0812 | -.1113 | -.1316 | | |
| .069 | | | | | | | | -.1661 | |
| .080 | | | | -.0564 | | | | | |
| .081 | | | -.0087 | | | | | | |
| .086 | | .0407 | | | | | | | |
| .094 | .0135 | | | | | | | | |
| .150 | | | | -.0779 | -.1024 | -.1010 | -.1377 | | |
| .157 | | | | | | | | -.1669 | |
| .163 | | .0806 | | | | | | | |
| .177 | | | -.0051 | | | | | | |
| .229 | .0662 | | | | | | | | |
| .245 | | .0515 | | | | | | | |
| .250 | | | | -.0761 | -.1090 | -.1147 | -.1098 | | |
| .274 | | | - 0051 | | | | | | |
| .345 | | | | | | | | -.1151 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0103 | | | | | | | |
| .400 | | | | .0000 | - 0810 | | -.1242 | | |
| .402 | | | .1165 | | | | | | |
| .418 | | | | | | | | | -.1932 |
| .497 | -.0195 | | | | | | | | |
| .503 | | | | | | | | -.1159 | |
| .550 | | | | .0261 | .0046 | | | | |
| .565 | | | .0309 | | | | | | |
| .600 | | | | | | | - 272 | | |
| .637 | | .0710 | | | | | | | |
| .650 | | | | | | .0868 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0197 | | | | |
| .725 | | | | -.0307 | | | | | |
| .730 | | | | | | | | | -.2012 |
| .750 | | | | | | -.0832 | -.1435 | | |
| .760 | | | -.0029 | | | | | | |
| .775 | | | | .0562 | .0493 | | | | |

ARC97-019 TAB1 LVAP(ALLML SEALED) LEFT WING BOT. (RSTL3)

BETA0 ( 1) = -.117 ALPHA0( 1) = -6.403

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .798 | | -.0229 | | | | | | | |
| .808 | | | -.0233 | | | | | | |
| .834 | -.1030 | | | | | | | | |
| .839 | | -.0921 | | | | | | | |
| .850 | | | | .0435 | .0214 | -.0857 | | | |
| .857 | | | -.0200 | | | | | | |
| .862 | | | | | | | | -.1404 | |
| .885 | -.1271 | | | | | | | | |
| .879 | | -.1350 | | | | | | | |
| .900 | -.1543 | | | -.0211 | | | -.1793 | | |
| .905 | | | -.0869 | | | | | | |
| .919 | | -.1189 | | | | | | | |
| .950 | | | | -.0766 | -.0487 | -.0807 | | | |
| .953 | | | -.1270 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0808 | | | | | | | | |
| 1.000 | | | -.1281 | | -.0747 | | -.1211 | | |

BETA0 ( 1) = -.139 ALPHA0( 2) = -4.308

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0106 | .0577 | .2951 | .6192 | .6188 | .5830 | .6016 | -.0830 | |
| .010 | -.0117 | .0571 | .1653 | .1216 | .0298 | .0543 | .0807 | | |
| .020 | -.0150 | .0577 | .0000 | .0261 | -.0164 | -.0440 | -.0605 | -.1179 | |
| .040 | | .0558 | .0726 | | | | | | |
| .050 | -.0065 | | | -.0171 | -.0560 | -.0755 | -.0955 | | |
| .069 | | | | | | | | -.1217 | |
| .080 | | | | -.0319 | | | | | |
| .081 | | | -.0157 | | | | | | |
| .086 | | .0376 | | | | | | | |
| .094 | -.0307 | | | | | | | | |
| .150 | | | | -.0667 | -.0798 | -.0769 | -.1037 | | |
| .157 | | | | | | | | -.1165 | |
| .163 | | .0678 | | | | | | | |
| .177 | | | -.0113 | | | | | | |
| .229 | .0580 | | | | | | | | |
| .246 | | .0458 | | | | | | | |
| .250 | | | | -.0206 | -.0874 | -.0874 | -.0868 | | |
| .274 | | | -.0542 | | | | | | |
| .345 | | | | | | | | -.0948 | |
| .362 | .0000 | | | | | | | | |

ARC97-019 TAB1 LVAP/ALLHL SEALED) LEFT WING BOT. (RETL31)

BETAO ( 1) = -.139 ALPHAO( 2) = -4.308

SECTION ( 11LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .390 | | -.0121 | | | | | | | |
| .400 | | | | .0000 | -.0758 | | -.0967 | | |
| .402 | | | .1127 | | | | | | |
| .418 | | | | | | | | | -.1369 |
| .497 | -.0158 | | | | | | | | |
| .503 | | | | | | | | -.0973 | |
| .550 | | | | .0625 | .0172 | | | | |
| .565 | | | .0382 | | | | | | |
| .600 | | | | | | | -.1094 | | |
| .637 | | .0685 | | | | | | | |
| .650 | | | | | | -.0805 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0182 | | | | |
| .725 | | | | .0666 | | | | | |
| .730 | | | | | | | | | -.1584 |
| .750 | | | | | | -.0666 | -.1278 | | |
| .760 | | | .0288 | | | | | | |
| .775 | | | | .1079 | .0600 | | | | |
| .798 | | -.0088 | | | | | | | |
| .809 | | | .0103 | | | | | | |
| .834 | -.1051 | | | | | | | | |
| .839 | | -.0760 | | | | | | | |
| .850 | | | | .0517 | .0379 | - 0655 | | | |
| .857 | | | -.0144 | | | | | | |
| .862 | | | | | | | | -.1287 | |
| .955 | -.1251 | | | | | | | | |
| .879 | | -.1181 | | | | | | | |
| .900 | -.1462 | | | -.0133 | | | -.1756 | | |
| .905 | | | -.0899 | | | | | | |
| .919 | | -.0984 | | | | | | | |
| .950 | | | | -.0720 | -.0343 | -.0639 | | | |
| .953 | | | -.1323 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0835 | | | | | | | | |
| 1.000 | | | -.1397 | | -.0979 | | -.1377 | | |

ARC97-018 !A8! LVAP(ALLML SEALED) LEFT WING BOT. (RETL3!)

BETAO( 1) = -.174 ALPHAO( 3) = -.147

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0379 | .0204 | .2847 | .7036 | .6525 | .6440 | .6466 | .0020 | |
| .010 | -.0484 | .0124 | .2043 | .1541 | .0949 | .1235 | .1592 | | |
| .020 | -.0371 | .0181 | .0000 | .0470 | .0570 | .0278 | .0055 | -.0205 | |
| .040 | | .0534 | .0223 | | | | | | |
| .050 | -.0404 | | | -.0002 | .0096 | -.0126 | -.0305 | | |
| .069 | | | | | | | | -.0348 | |
| .080 | | | | -.0062 | | | | | |
| .091 | | | .0234 | | | | | | |
| .096 | | .0347 | | | | | | | |
| .134 | -.0947 | | | | | | | | |
| .150 | | | | -.0503 | -.0358 | -.0289 | -.0397 | | |
| .157 | | | | | | | | -.0403 | |
| .163 | | .0882 | | | | | | | |
| .177 | | | -.0652 | | | | | | |
| .229 | .0401 | | | | | | | | |
| .246 | | -.0008 | | | | | | | |
| .250 | | | | -.0539 | -.0475 | -.0402 | -.0313 | | |
| .274 | | | -.0522 | | | | | | |
| .345 | | | | | | | | -.0362 | |
| .352 | .0000 | | | | | | | | |
| .390 | | .0098 | | | | | | | |
| .400 | | | | .0000 | -.0489 | | -.0403 | | |
| .402 | | | .1254 | | | | | | |
| .418 | | | | | | | | | -.0483 |
| .497 | .0149 | | | | | | | | |
| .503 | | | | | | | | -.0464 | |
| .550 | | | | .0712 | .0367 | | | | |
| .565 | | | .0784 | | | | | | |
| .600 | | | | | | | -.0601 | | |
| .637 | | .0954 | | | | | | | |
| .650 | | | | | | -.0790 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0478 | | | | |
| .735 | | | | .0933 | | | | | |
| .750 | | | | | | | | | -.0825 |
| .750 | | | | | | -.0546 | -.0840 | | |
| .775 | | | .0642 | | | | | | |
| .798 | | .0074 | | .1538 | .1060 | | | | |
| .809 | | | .0848 | | | | | | |
| .834 | -.0955 | | | | | | | | |
| .875 | | -.0558 | | | | | | | |
| .850 | | | | .1186 | .0903 | -.0338 | | | |
| .857 | | | .0067 | | | | | | |
| .862 | | | | | | | | -.1058 | |

ARC97-019 TA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETEST)

BETAO ( 1) = -.174 ALPHAO( 3) = -.147

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.1133 | | | | | | | | |
| .879 | | -.0749 | | | | | | | |
| .900 | -.1353 | | | .0321 | | | -.1497 | | |
| .905 | | | -.0730 | | | | | | |
| .919 | | -.0949 | | | | | | | |
| .950 | | | | -.0420 | .0163 | -.0172 | | | |
| .953 | | | -.1211 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0869 | | | | | | | | |
| 1.000 | | | -.1461 | | -.1136 | | -.1709 | | |

BETAO ( 1) = -.167 ALPHAO( 4) = 4.050

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0719 | -.0147 | .3025 | .7378 | .6951 | .6978 | .6948 | .0927 | |
| .010 | -.0605 | -.0028 | .2599 | .2228 | .1595 | .2270 | .2853 | | |
| .020 | -.0523 | .0350 | .0000 | .1139 | .1521 | .1420 | .1185 | .0910 | |
| .040 | | .0694 | .1107 | | | | | | |
| .050 | -.0438 | | | .0495 | .0854 | .0944 | .0928 | | |
| .069 | | | | | | | | .0718 | |
| .080 | | | | .0302 | | | | | |
| .081 | | | .0178 | | | | | | |
| .096 | | .0341 | | | | | | | |
| .094 | -.0136 | | | | | | | | |
| .150 | | | | -.0137 | .0321 | .0505 | .0748 | | |
| .157 | | | | | | | | .0600 | |
| .183 | | .1047 | | | | | | | |
| .177 | | | .0008 | | | | | | |
| .239 | .0391 | | | | | | | | |
| .246 | | .0301 | | | | | | | |
| .250 | | | | .0136 | .0164 | .0452 | .0671 | | |
| .274 | | | .0078 | | | | | | |
| .345 | | | | | | | | .0553 | |
| .359 | .0000 | | | | | | | | |
| .343 | | .0243 | | | | | | | |
| .400 | | | | .0000 | .0282 | | .0523 | | |
| .402 | | | .1015 | | | | | | |
| .418 | | | | | | | | | -.0073 |
| .427 | .0065 | | | | | | | | |
| .503 | | | | | | | | .0399 | |
| .552 | | | | .1800 | .0901 | | | | |

DATE 08 OCT 75

TA81B - PRESSURE SOURCE DATA TABULATION

ARC97-019 TA81 LVAP(ALLHL SEALED) LEFT WING BOT.

BETAO ( 1) = -.167 ALPHAO( 4) = 4.050

SECTION ( 1)LEFT WING BOTTOM

DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | | | | | | | |
| .600 | | | .1614 | | | | | | |
| .637 | | | | | | | | | |
| .650 | | .1819 | | | | | | | |
| .670 | | | | | | | .0229 | | |
| .700 | .0000 | | | | | .0089 | | | |
| .725 | | | | | | | | | |
| .730 | | | | | .2254 | | | .0000 | |
| .750 | | | | .2803 | | | | | |
| .760 | | | | | | | | | |
| .775 | | | .2225 | | | .1167 | -.0054 | | -.1260 |
| .798 | | | | | | | | | |
| .808 | | .1263 | | .2664 | .2536 | | | | |
| .834 | -.0537 | | .204 | | | | | | |
| .839 | | | | | | | | | |
| .850 | | .0101 | | | | | | | |
| .857 | | | | | | | | | |
| .862 | | | .0092 | .1370 | .1684 | .1302 | | | |
| .865 | -.0655 | | | | | | | | |
| .879 | | | | | | | | | |
| .900 | -.1108 | -.0623 | | | | | | -.0786 | |
| .905 | | | | | | | | | |
| .919 | | | -.0812 | .0449 | | | | | |
| .950 | | -.1132 | | | | | -.0840 | | |
| .953 | | | | | | | | | |
| .955 | | | | -.0319 | .0408 | .0976 | | | |
| .965 | -.0913 | .0000 | -.1308 | | | | | | |
| 1.000 | | | | | | | | | |
| | | | -.1737 | | | | | | |
| | | | | -.1475 | | | -.1503 | | |

BETAO ( 1) = -.139 ALPHAO( 5) = 8.292

SECTION ( 1)LEFT WING BOTTOM

DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3340 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0651 | -.0212 | .3273 | .7733 | .7248 | .7448 | .7337 | .1445 | |
| .010 | -.0078 | .0243 | .3393 | .3057 | .3237 | .4104 | .4583 | | |
| .020 | .0086 | .0530 | .0000 | .2017 | .3291 | .3261 | .3259 | .1937 | |
| .040 | | .0596 | .1546 | | | | | | |
| .050 | .0273 | | | .1315 | .1895 | .2340 | .2733 | | |
| .069 | | | | | | | | | |
| .080 | | | | .1106 | | | | | |
| .081 | | | | | | | | .1957 | |
| .086 | | .0453 | | | | | | | |
| | .0773 | | | | | | | | |

DATE 08 OCT 75 1A818 - PRESSURE SOURCE DATA TABULATION

APC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT.

BETA0 ( 1) = -.139 ALPHA0( 5) = 9.292

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .5730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0370 | | | | | | | | |
| .150 | | | | .0737 | .1393 | .1836 | .2414 | | |
| .157 | | | | | | | | .1717 | |
| .163 | | .0946 | | | | | | | |
| .177 | | | .0912 | | | | | | |
| .229 | .0416 | | | | | | | | |
| .246 | | .1100 | | | | | | | |
| .250 | | | | .1457 | .1210 | .1788 | .2176 | | |
| .274 | | | .0636 | | | | | | |
| .345 | | | | | | | | .1522 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0232 | | | | | | | |
| .400 | | | | .0000 | .1794 | | .1827 | | |
| .402 | | | .1816 | | | | | | |
| .418 | | | | | | | | | -.0988 |
| .497 | .0001 | | | | | | | | |
| .503 | | | | | | | | .1252 | |
| .550 | | | | .3881 | .3634 | | | | |
| .565 | | | .3499 | | | | | | |
| .600 | | | | | | | .1414 | | |
| .637 | | .3413 | | | | | | | |
| .650 | | | | | | .3932 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .4370 | | | | |
| .725 | | | | .3249 | | | | | |
| .730 | | | | | | | | | -.2284 |
| .750 | | | | | | .3752 | .3285 | | |
| .760 | | | .1839 | | | | | | |
| .775 | | | | .2810 | .3105 | | | | |
| .798 | | .0977 | | | | | | | |
| .800 | | | .0486 | | | | | | |
| .834 | -.0408 | | | | | | | | |
| .839 | | -.0227 | | | | | | | |
| .850 | | | | .0988 | .1443 | .2520 | | | |
| .857 | | | -.0383 | | | | | | |
| .862 | | | | | | | | .0990 | |
| .865 | -.0814 | | | | | | | | |
| .879 | | -.0945 | | | | | | | |
| .900 | -.1205 | | | .0063 | | | .2039 | | |
| .905 | | | -.1092 | | | | | | |
| .919 | | -.1413 | | | | | | | |
| .950 | | | | -.0591 | .0282 | .1139 | | | |
| .953 | | | -.1518 | | | | | | |
| .965 | | .0000 | | | | | | | |
| .985 | -.0989 | | | | | | | | |

ARC97-019 !A81 LVAP(ALLHL SEALED) LEFT WING BOT. !RETL31!

BETAO ( 1) = -.139 ALPHAO( 5) = 8.292

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1929 | | -.1893 | | -.1364 | | |

BETAO ( 1) = -.118 ALPHAO( 6) = !0.383

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0602 | -.0360 | .3163 | .7907 | .7994 | .8003 | .7746 | .1350 | |
| .010 | -.0216 | .0135 | .3275 | .3467 | .4301 | .5299 | .6073 | | |
| .020 | .0097 | .0583 | .0000 | .2568 | .4135 | .4330 | .4755 | .2203 | |
| .040 | | .0773 | .1525 | | | | | | |
| .050 | .0064 | | | .1866 | .2482 | .3387 | .3967 | | |
| .069 | | | | | | | | .2236 | |
| .080 | | | | .1607 | | | | | |
| .08' | | | .0981 | | | | | | |
| .085 | | .0751 | | | | | | | |
| .094 | .0125 | | | | | | | | |
| .150 | | | | .1253 | .1944 | .2668 | .3250 | | |
| .157 | | | | | | | | .2222 | |
| .103 | | .0891 | | | | | | | |
| .177 | | | .0609 | | | | | | |
| .229 | .0430 | | | | | | | | |
| .246 | | .1089 | | | | | | | |
| .250 | | | | .1013 | .1784 | .2513 | .2830 | | |
| .274 | | | .0299 | | | | | | |
| .345 | | | | | | | | .3036 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0351 | | | | | | | |
| .400 | | | | .0000 | .1995 | | .3518 | | |
| .402 | | | .2854 | | | | | | |
| .418 | | | | | | | | | -.1387 |
| .497 | -.0184 | | | | | | | | |
| .503 | | | | | | | | .3097 | |
| .550 | | | | .4185 | .4680 | | | | |
| .565 | | | .3493 | | | | | | |
| .600 | | | | | | | .3135 | | |
| .637 | | .3360 | | | | | | | |
| .650 | | | | | | .3106 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3224 | | | | |
| .725 | | | | .2838 | | | | | |
| .730 | | | | | | | | | -.2439 |
| .750 | | | | | | .2959 | .2990 | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL31)

BETAO ( 1) = -.118 ALPHAO( 6) = 10.383

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .1405 | | | | | | |
| .775 | | | | .1842 | .2541 | | | | |
| .798 | | .0665 | | | | | | | |
| .808 | | | .0322 | | | | | | |
| .834 | -.0538 | | | | | | | | |
| .839 | | -.0336 | | | | | | | |
| .850 | | | | .0469 | .1534 | .2314 | | | |
| .857 | | | -.0641 | | | | | | |
| .862 | | | | | | | | .0725 | |
| .865 | -.0709 | | | | | | | | |
| .879 | | -.0973 | | | | | | | |
| .900 | -.1228 | | | -.0055 | | | .1507 | | |
| .905 | | | -.1317 | | | | | | |
| .919 | | -.1432 | | | | | | | |
| .950 | | | | -.0603 | .0257 | .1063 | | | |
| .953 | | | -.1655 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .955 | -.1012 | | | | | | | | |
| 1.000 | | | -.1976 | | -.1890 | | -.1466 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL32) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.000 RN/FT = 3.000
ELV-IB = .000 ELV-OB = .000
RUDDER = .000 SPDBRK = 55.000

BETAO ( 1) = .079 ALPHAO( 1) = -6.373

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0111 | .0043 | .2550 | .5621 | .5844 | .5343 | .5440 | -.1688 | |
| .010 | -.0094 | .0320 | .1157 | -.0098 | -.0509 | -.0145 | -.0229 | | |
| .020 | .0063 | .0278 | .0000 | -.1006 | -.1006 | -.1310 | -.1604 | -.2330 | |
| .040 | | .0215 | .0425 | | | | | | |
| .050 | -.0465 | | | -.1308 | -.1450 | -.1613 | -.1944 | | |
| .059 | | | | | | | | -.2357 | |
| .080 | | | | -.1199 | | | | | |
| .081 | | | -.0445 | | | | | | |
| .086 | | -.0140 | | | | | | | |
| .094 | .0466 | | | | | | | | |
| .150 | | | | -.0560 | -.1610 | -.1523 | -.1920 | | |
| .157 | | | | | | | | -.2378 | |
| .163 | | .0487 | | | | | | | |
| .177 | | | -.0584 | | | | | | |
| .229 | .0113 | | | | | | | | |
| .246 | | .0129 | | | | | | | |
| .250 | | | | -.0468 | -.1417 | -.1722 | -.1680 | | |
| .274 | | | -.0539 | | | | | | |
| .345 | | | | | | | | -.2463 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0668 | | | | | | | |
| .400 | | | | .0000 | -.0613 | | -.1747 | | |
| .402 | | | .0749 | | | | | | |
| .418 | | | | | | | | | -.2388 |
| .497 | -.0772 | | | | | | | | |
| .503 | | | | | | | | -.1630 | |
| .550 | | | | .0349 | .0202 | | | | |
| .565 | | | .0202 | | | | | | |
| .600 | | | | | | | -.1731 | | |
| .637 | | .0525 | | | | | | | |
| .650 | | | | | | -.0845 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0512 | | | | |
| .725 | | | | .1006 | | | | | |
| .730 | | | | | | | | | -.2580 |
| .750 | | | | | | -.0521 | -.1795 | | |
| .760 | | | .0448 | | | | | | |
| .775 | | | | .0872 | .0838 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL32)

BETAO ( 1) = .079 ALPHAO( 1) = -6.373

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .798 | | -.0658 | | | | | | | |
| .808 | | | .0178 | | | | | | |
| .834 | -.1602 | | | | | | | | |
| .839 | | -.1334 | | | | | | | |
| .850 | | | | .0024 | .0078 | -.0561 | | | |
| .857 | | | -.0769 | | | | | | |
| .862 | | | | | | | | -.2092 | |
| .865 | -.1748 | | | | | | | | |
| .879 | | -.0869 | | | | | | | |
| .900 | -.1175 | | | -.0720 | | | -.1523 | | |
| .905 | | | -.1577 | | | | | | |
| .919 | | -.0959 | | | | | | | |
| .950 | | | | -.1313 | -.0794 | -.0773 | | | |
| .953 | | | -.1644 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .955 | -.1409 | | | | | | | | |
| 1.000 | | | -.1504 | | -.0716 | | -.1220 | | |

BETAO ( 1) = .053 ALPHAO( 2) = -4.277

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0323 | -.0019 | .2285 | .5505 | .6000 | .5539 | .5741 | -.1315 | |
| .010 | -.0494 | .0265 | .0927 | .0338 | -.0319 | .0157 | .0227 | | |
| .020 | -.0292 | .0154 | .0000 | -.0559 | -.0769 | -.0920 | -.1235 | -.1839 | |
| .040 | | .0077 | .0283 | | | | | | |
| .050 | -.0550 | | | -.0907 | -.1157 | -.1243 | -.1569 | | |
| .059 | | | | | | | | -.1880 | |
| .080 | | | | -.0975 | | | | | |
| .081 | | | -.0597 | | | | | | |
| .086 | | -.0243 | | | | | | | |
| .094 | .0477 | | | | | | | | |
| .150 | | | | -.0527 | -.1327 | -.1237 | -.1617 | | |
| .157 | | | | | | | | -.1830 | |
| .163 | | .0283 | | | | | | | |
| .177 | | | -.0498 | | | | | | |
| .229 | -.0008 | | | | | | | | |
| .249 | | .0048 | | | | | | | |
| .251 | | | | -.0211 | -.1344 | -.1352 | -.1378 | | |
| .274 | | | -.0476 | | | | | | |
| .345 | | | | | | | | -.1421 | |
| .369 | .0000 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL32)

BETAO ( 1) = .053 ALPHAO( 2) = -4.277

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .390 | | -.0578 | | | | | | | |
| .400 | | | | .0000 | -.0370 | | -.1455 | | |
| .402 | | | .0687 | | | | | | |
| .418 | | | | | | | | | -.1955 |
| .497 | -.0661 | | | | | | | | |
| .503 | | | | | | | | -.1434 | |
| .550 | | | | .0639 | .0226 | | | | |
| .565 | | | .0383 | | | | | | |
| .600 | | | | | | | -.1530 | | |
| .637 | | .0684 | | | | | | | |
| .659 | | | | | | -.0826 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0818 | | | | |
| .725 | | | | .1214 | | | | | |
| .730 | | | | | | | | | -.2109 |
| .750 | | | | | | -.0337 | -.1652 | | |
| .760 | | | .0510 | | | | | | |
| .775 | | | | .1072 | .0947 | | | | |
| .798 | | -.0385 | | | | | | | |
| .808 | | | .0243 | | | | | | |
| .834 | -.1555 | | | | | | | | |
| .839 | | -.1178 | | | | | | | |
| .850 | | | | .0118 | .0270 | -.0272 | | | |
| .857 | | | -.0780 | | | | | | |
| .862 | | | | | | | | -.1848 | |
| .885 | -.1674 | | | | | | | | |
| .879 | | -.1080 | | | | | | | |
| .900 | -.1181 | | | -.0673 | | | -.1394 | | |
| .905 | | | -.1631 | | | | | | |
| .919 | | -.1072 | | | | | | | |
| .950 | | | | -.1291 | -.0722 | -.0542 | | | |
| .953 | | | -.1882 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1439 | | | | | | | | |
| 1.000 | | | -.1693 | | -.0948 | | -.1373 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL321)

BETAO ( 1) = .011 ALPHAO( 3) = -.098

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0724 | -.0328 | .2174 | .6515 | .6414 | .8235 | .6358 | -.0274 | |
| .010 | -.0605 | -.0071 | .1532 | .1167 | .0411 | .0849 | .1259 | | |
| .020 | -.0425 | .0049 | .0000 | .0126 | .0031 | -.0065 | -.0368 | -.0601 | |
| .040 | | .0030 | .1069 | | | | | | |
| .050 | -.0956 | | | -.0369 | -.0343 | -.0395 | -.0719 | | |
| .069 | | | | | | | | -.0757 | |
| .080 | | | | -.0531 | | | | | |
| .081 | | | -.0347 | | | | | | |
| .086 | | -.0249 | | | | | | | |
| .094 | .0000 | | | | | | | | |
| .150 | | | | -.0785 | -.0697 | -.0561 | -.0689 | | |
| .157 | | | | | | | | -.0731 | |
| .163 | | .0427 | | | | | | | |
| .177 | | | -.0219 | | | | | | |
| .229 | -.0026 | | | | | | | | |
| .246 | | .0343 | | | | | | | |
| .250 | | | | .0008 | -.0788 | -.0687 | -.0651 | | |
| .274 | | | -.0157 | | | | | | |
| .345 | | | | | | | | -.0577 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0131 | | | | | | | |
| .400 | | | | .0000 | -.0034 | | -.0678 | | |
| .402 | | | .1126 | | | | | | |
| .418 | | | | | | | | | -.0765 |
| .497 | .0011 | | | | | | | | |
| .503 | | | | | | | | -.0659 | |
| .550 | | | | .1295 | .0859 | | | | |
| .565 | | | .0704 | | | | | | |
| .600 | | | | | | | -.0816 | | |
| .637 | | .1010 | | | | | | | |
| .650 | | | | | | -.0012 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1729 | | | | |
| .725 | | | | .2069 | | | | | |
| .730 | | | | | | | | | -.1036 |
| .750 | | | | | | .0809 | -.0999 | | |
| .760 | | | .1396 | | | | | | |
| .775 | | | | .2046 | .1874 | | | | |
| .798 | | -.0027 | | | | | | | |
| .808 | | | .0628 | | | | | | |
| .834 | -.1282 | | | | | | | | |
| .839 | | -.0689 | | | | | | | |
| .850 | | | | .0713 | .0965 | .0793 | | | |
| .857 | | | -.0460 | | | | | | |
| .882 | | | | | | | | -.1435 | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL32)

BETAO ( 1) = .011 ALPHAO( 3) = -.098

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.1399 | | | | | | | | |
| .879 | | -.0829 | | | | | | | |
| .900 | -.1194 | | | -.0200 | | | -.0632 | | |
| .905 | | | -.1370 | | | | | | |
| .919 | | -.1208 | | | | | | | |
| .950 | | | | -.0939 | -.0308 | .0245 | | | |
| .953 | | | -.1743 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1367 | | | | | | | | |
| 1.000 | | | -.1800 | | -.1090 | | -.1610 | | |

BETAO ( 1) = .020 ALPHAO( 4) = 4.139

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0185 | -.0374 | .2885 | .8915 | .6948 | .6917 | .7030 | .1045 | |
| .010 | -.0032 | .0162 | .2646 | .1900 | .1476 | .2481 | .2944 | | |
| .020 | -.0128 | .0215 | .0000 | .0851 | .1698 | .1863 | .1278 | .1077 | |
| .040 | | .0175 | .0901 | | | | | | |
| .050 | .0328 | | | .0333 | .0855 | .1104 | .1013 | | |
| .069 | | | | | | | | .0873 | |
| .080 | | | | .0225 | | | | | |
| .081 | | | -.0040 | | | | | | |
| .088 | | -.0002 | | | | | | | |
| .094 | -.0510 | | | | | | | | |
| .150 | | | | .0361 | .0446 | .0753 | .0965 | | |
| .157 | | | | | | | | .0777 | |
| .163 | | .0837 | | | | | | | |
| .177 | | | .0255 | | | | | | |
| .229 | .0068 | | | | | | | | |
| .246 | | .0501 | | | | | | | |
| .250 | | | | .0743 | .0589 | .0705 | .0868 | | |
| .275 | | | .0085 | | | | | | |
| .345 | | | | | | | | .0650 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0377 | | | | | | | |
| .400 | | | | .0000 | .0947 | | .0708 | | |
| .402 | | | .2268 | | | | | | |
| .418 | | | | | | | | | -.0298 |
| .497 | .0275 | | | | | | | | |
| .503 | | | | | | | | .0417 | |
| .550 | | | | .2990 | .2908 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL32)

BETAO ( 1) = .020 ALPHAO( 4) = 4.129

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .2595 | | | | | | |
| .600 | | | | | | | .0653 | | |
| .637 | | .2576 | | | | | | | |
| .650 | | | | | | .2625 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3730 | | | | |
| .725 | | | | .3114 | | | | | |
| .730 | | | | | | | | | -.1815 |
| .750 | | | | | | .3216 | .1308 | | |
| .760 | | | .1746 | | | | | | |
| .775 | | | | .2664 | .2981 | | | | |
| .798 | | .0737 | | | | | | | |
| .808 | | | .0547 | | | | | | |
| .834 | -.0939 | | | | | | | | |
| .839 | | -.0500 | | | | | | | |
| .950 | | | | .0847 | .1280 | .2021 | | | |
| .857 | | | -.0600 | | | | | | |
| .852 | | | | | | | | -.0548 | |
| .865 | -.1035 | | | | | | | | |
| .879 | | -.1245 | | | | | | | |
| .900 | -.1404 | | | -.0130 | | | .1518 | | |
| .905 | | | -.1463 | | | | | | |
| .919 | | -.1721 | | | | | | | |
| .950 | | | | -.0898 | -.0131 | .0668 | | | |
| .953 | | | -.1947 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1313 | | | | | | | | |
| 1.000 | | | - 2045 | | -.1735 | | -.1626 | | |

BETAO ( 1) = .053 ALPHAO( 5) = 8.392

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0511 | -.0299 | .3025 | .7550 | .7399 | .7693 | .7459 | .1408 | |
| .010 | -.0193 | .0150 | .3259 | .3319 | .4018 | .4715 | .5060 | | |
| .020 | .0178 | .0335 | .0000 | .2857 | .3854 | .3970 | .3755 | .2102 | |
| .040 | | .0383 | .2350 | | | | | | |
| .050 | .0202 | | | .1834 | .2369 | .3000 | .3221 | | |
| .069 | | | | | | | | .2131 | |
| .080 | | | | .1620 | | | | | |
| .081 | | | .1404 | | | | | | |
| .086 | | .0784 | | | | | | | |

ARC97-019 !A81 EVAP(ALLHL SEALED) LEFT WING BOT. !RETL32!

BETAO( 1) = .053 ALPHAO( 5) = 8.392

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0276 | | | | | | | | |
| .150 | | | | .1280 | .2166 | .2630 | .2983 | | |
| .157 | | | | | | | | .2274 | |
| .163 | | .2070 | | | | | | | |
| .177 | | | .0873 | | | | | | |
| .229 | 0170 | | | | | | | | |
| .246 | | .0895 | | | | | | | |
| .250 | | | | .1678 | .2446 | .2724 | .2864 | | |
| .274 | | | .0799 | | | | | | |
| .345 | | | | | | | | .3389 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .2119 | | | | | | | |
| .400 | | | | .0000 | .4397 | | .4290 | | |
| .402 | | | .3968 | | | | | | |
| .419 | | | | | | | | | -.1718 |
| .497 | .1381 | | | | | | | | |
| .503 | | | | | | | | .3254 | |
| .550 | | | | .3754 | .4279 | | | | |
| .555 | | | .3543 | | | | | | |
| .600 | | | | | | | .3844 | | |
| .637 | | .3656 | | | | | | | |
| .650 | | | | | | .3817 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3224 | | | | |
| .725 | | | | .2414 | | | | | |
| .730 | | | | | | | | | -.3029 |
| .750 | | | | | | .3200 | .4237 | | |
| .760 | | | .1049 | | | | | | |
| .775 | | | | .1752 | .2628 | | | | |
| .798 | | 0303 | | | | | | | |
| .828 | | | - 0017 | | | | | | |
| .834 | -.0998 | | | | | | | | |
| .839 | | -.0844 | | | | | | | |
| .850 | | | | .0392 | .0974 | .1708 | | | |
| .857 | | | -.1055 | | | | | | |
| .862 | | | | | | | | .0867 | |
| .865 | -.1162 | | | | | | | | |
| .879 | | - 1541 | | | | | | | |
| .900 | -.1683 | | | -.0358 | | | .1289 | | |
| .905 | | | -.1768 | | | | | | |
| .919 | | -.1996 | | | | | | | |
| .950 | | | | -.085 | - 0386 | .0329 | | | |
| .953 | | | - 2134 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1500 | | | | | | | | |

ARC97-019 (AB) LVAP(ALLHL SEALED) LEFT WING BOT. (RETL32)

BETAO ( 1) = .053 ALPHAO( 5) = 8.392

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.2307 | | -.2197 | | -.1975 | | |

BETAO ( 1) = .074 ALPHAO( 6) = 10.494

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0590 | -.0368 | .3003 | .7426 | .8180 | .8295 | .7653 | .0774 | |
| .010 | -.0127 | .0114 | .3574 | .3680 | .4969 | .5993 | .6720 | | |
| .020 | .0196 | .0303 | .0000 | .2899 | .4677 | .4816 | .5598 | .2354 | |
| .040 | | .0359 | .1634 | | | | | | |
| .050 | .0530 | | | .1889 | .3087 | .4008 | .5199 | | |
| .059 | | | | | | | | .2822 | |
| .080 | | | | .1555 | | | | | |
| .081 | | | .0837 | | | | | | |
| .086 | | .0670 | | | | | | | |
| .094 | -.0135 | | | | | | | | |
| .150 | | | | .1301 | .2666 | .3943 | .5446 | | |
| .157 | | | | | | | | .3210 | |
| .163 | | .1831 | | | | | | | |
| .177 | | | .0642 | | | | | | |
| .229 | .0317 | | | | | | | | |
| .246 | | .0757 | | | | | | | |
| .250 | | | | .3876 | .4391 | .5593 | .4710 | | |
| .274 | | | .3316 | | | | | | |
| .345 | | | | | | | | .3745 | |
| .352 | .0000 | | | | | | | | |
| .390 | | .3393 | | | | | | | |
| .400 | | | | .0000 | .3977 | | .4484 | | |
| .402 | | | .3479 | | | | | | |
| .418 | | | | | | | | | -.2302 |
| .497 | .2542 | | | | | | | | |
| .503 | | | | | | | | .3434 | |
| .550 | | | | .3109 | .3230 | | | | |
| .565 | | | .3476 | | | | | | |
| .611 | | | | | | | .3981 | | |
| .637 | | .3520 | | | | | | | |
| .650 | | | | | | .3448 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2867 | | | | |
| .735 | | | | .2312 | | | | | |
| .771 | | | | | | | | | -.3156 |
| .790 | | | | | | .2214 | .3434 | | |

ARC97-019 TAB: LVAP(ALLHL SEALED) LEFT WING BOT. (RETL 32)

BETA0 ( ) = 074 ALPHA0( 6) = 10.494

SECTION ( )LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | 3640 | 4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .0628 | | | | | | |
| .775 | | | | .1739 | .2241 | | | | |
| .798 | | -.0003 | | | | | | | |
| .808 | | | -.0203 | | | | | | |
| .834 | -.1161 | | | | | | | | |
| .879 | | -.1012 | | | | | | | |
| .850 | | | | .0182 | .0670 | .1148 | | | |
| .857 | | | -.1048 | | | | | | |
| .862 | | | | | | | | .0514 | |
| .855 | -.1251 | | | | | | | | |
| .879 | | -.1553 | | | | | | | |
| .900 | -.1688 | | | -.0644 | | | .0825 | | |
| .905 | | | -.1739 | | | | | | |
| .919 | | -.1907 | | | | | | | |
| .950 | | | | -.1329 | -.0584 | .0082 | | | |
| .953 | | | -.2157 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1443 | | | | | | | | |
| 1.000 | | | -.2412 | | -.2438 | | -.2090 | | |

ARC97-019 IA81 LVAP(ALLML SEALED) LEFT WING BOT. (RETL33) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.550 RN/FT = 3.000
ELV-IB = .000 ELV-OB = .000
RUDDER = .000 SPOILR = 55.000

BETAO ( 1) = .428 ALPHAO( 1) = -6.390

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0139 | -.0270 | .2091 | .4922 | .4295 | .3995 | .4213 | -.3729 | |
| .010 | .0251 | -.0527 | -.0057 | -.2270 | -.3337 | -.2278 | -.2523 | | |
| .020 | .0282 | -.0929 | .0000 | -.3359 | -.3711 | -.3703 | -.4000 | -.3928 | |
| .040 | | -.0693 | -.1777 | | | | | | |
| .050 | -.0533 | | | -.3245 | -.3928 | -.4055 | -.4334 | | |
| .069 | | | | | | | | -.3943 | |
| .080 | | | | -.3095 | | | | | |
| .081 | | | -.1085 | | | | | | |
| .086 | | -.0130 | | | | | | | |
| .094 | .0076 | | | | | | | | |
| .150 | | | | -.2257 | -.3625 | -.3832 | -.4202 | | |
| .157 | | | | | | | | -.4011 | |
| .163 | | .0233 | | | | | | | |
| .177 | | | -.1003 | | | | | | |
| .229 | -.1510 | | | | | | | | |
| .246 | | -.0376 | | | | | | | |
| .250 | | | | -.1909 | -.3133 | -.3879 | -.3687 | | |
| .274 | | | -.1783 | | | | | | |
| .345 | | | | | | | | -.3476 | |
| .352 | .0000 | | | | | | | | |
| .390 | | -.0378 | | | | | | | |
| .400 | | | | .0000 | -.0028 | | -.3092 | | |
| .402 | | | .0714 | | | | | | |
| .418 | | | | | | | | | -.2961 |
| .497 | -.0478 | | | | | | | | |
| .503 | | | | | | | | -.3298 | |
| .550 | | | | .1211 | .1050 | | | | |
| .565 | | | .1368 | | | | | | |
| .600 | | | | | | | -.1834 | | |
| .637 | | .1471 | | | | | | | |
| .650 | | | | | | .0923 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1145 | | | | |
| .725 | | | | .0703 | | | | | |
| .730 | | | | | | | | | -.2159 |
| .750 | | | | | | .0405 | -.1419 | | |
| .760 | | | -.0574 | | | | | | |
| .775 | | | | -.0192 | .0249 | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RET.331

BETAO ( 1) = .428 ALPHAO( 1) = -6.390

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2590 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .798 | | -.1393 | | | | | | | |
| .808 | | | -.1748 | | | | | | |
| .834 | -.2307 | | | | | | | | |
| .839 | | -.2078 | | | | | | | |
| .850 | | | | -.1940 | -.1299 | -.0909 | | | |
| .857 | | | -.2816 | | | | | | |
| .862 | | | | | | | | -.2564 | |
| .865 | -.2125 | | | | | | | | |
| .879 | | -.2251 | | | | | | | |
| .900 | -.2354 | | | -.2843 | | | -.1680 | | |
| .905 | | | -.3373 | | | | | | |
| .919 | | -.2994 | | | | | | | |
| .950 | | | | -.3514 | -.1830 | -.2005 | | | |
| .953 | | | -.3747 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.3195 | | | | | | | | |
| 1.000 | | | -.2549 | | -.1981 | | -.2687 | | |

BETAO ( 1) = .401 ALPHAO( 2) = -4.271

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0462 | -.0413 | .2309 | .5120 | .4994 | .4575 | .4660 | -.3268 | |
| .010 | .0029 | -.0547 | .0493 | -.1564 | -.2563 | -.1909 | -.1917 | | |
| .020 | .0235 | -.0865 | .0000 | -.2696 | -.2994 | -.3290 | -.3599 | -.3915 | |
| .040 | | -.0848 | -.1295 | | | | | | |
| .050 | -.0582 | | | -.2450 | -.3322 | -.3618 | -.3890 | | |
| .069 | | | | | | | | -.4012 | |
| .080 | | | | -.2370 | | | | | |
| .081 | | | -.0775 | | | | | | |
| .086 | | -.0051 | | | | | | | |
| .094 | .0009 | | | | | | | | |
| .150 | | | | -.1704 | -.3112 | -.3446 | -.3609 | | |
| .157 | | | | | | | | -.3881 | |
| .163 | | .0292 | | | | | | | |
| .177 | | | -.0750 | | | | | | |
| .229 | -.1422 | | | | | | | | |
| 246 | | -.0215 | | | | | | | |
| .250 | | | | -.1781 | -.2120 | -.3346 | -.3093 | | |
| .274 | | | -.1638 | | | | | | |
| .345 | | | | | | | | -.3406 | |
| .362 | .0000 | | | | | | | | |

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

AR297-019 TAB1 LVAR(ALLHL SCALED) LEFT WING BOT. (RETL331)

BETAO ( 1) = .401 ALPHAO( 21) = -4.271

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BM | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CM | | | | | | | | | |
| .390 | | -.0388 | | | | | | | |
| .400 | | | | .0000 | .0967 | | -.1739 | | |
| .402 | | | .1043 | | | | | | |
| .418 | | | | | | | | | -.3035 |
| .497 | -.0459 | | | | | | | | |
| .503 | | | | | | | | -.2016 | |
| .550 | | | | .2141 | .1819 | | | | |
| .565 | | | .2075 | | | | | | |
| .600 | | | | | | | -.0625 | | |
| .637 | | .2035 | | | | | | | |
| .650 | | | | | | .1562 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | 0000 | | | | .1791 | | | | |
| .725 | | | | .1072 | | | | | |
| .730 | | | | | | | | | -.1587 |
| .750 | | | | | | .0569 | .1183 | | |
| .760 | | | -.0329 | | | | | | |
| .775 | | | | .0170 | .0641 | | | | |
| .798 | | -.1348 | | | | | | | |
| .808 | | | -.1578 | | | | | | |
| .834 | -.2290 | | | | | | | | |
| .839 | | -.2365 | | | | | | | |
| .850 | | | | -.1672 | -.1188 | -.0745 | | | |
| .857 | | | -.2794 | | | | | | |
| .862 | | | | | | | | -.2172 | |
| .865 | -.2366 | | | | | | | | |
| .879 | | -.2460 | | | | | | | |
| .900 | -.2376 | | | -.2637 | | | -.0875 | | |
| .905 | | | -.3611 | | | | | | |
| .919 | | -.3036 | | | | | | | |
| .950 | | | | -.3336 | -.2027 | -.1906 | | | |
| .953 | | | -.3823 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.3185 | | | | | | | | |
| 1.000 | | | -.2691 | | -.1982 | | -.2558 | | |

ARC97-019 !A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETS33)

BETAO ( 1) = .348 ALPHAO( 31 = -.036

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0705 | -.0970 | .2519 | .6114 | .6080 | .5847 | .5982 | -.1322 | |
| .010 | -.0145 | -.0902 | .1625 | -.0209 | -.1162 | -.0540 | -.0035 | | |
| .020 | .0199 | -.0851 | .0000 | -.1292 | -.1571 | -.1629 | -.2013 | -.1854 | |
| .040 | | -.0101 | .1010 | | | | | | |
| .050 | -.0665 | | | -.1035 | -.1622 | -.1802 | -.2210 | | |
| .069 | | | | | | | | -.1708 | |
| .080 | | | | -.1256 | | | | | |
| .091 | | | -.0531 | | | | | | |
| .096 | | -.0150 | | | | | | | |
| .094 | .0165 | | | | | | | | |
| .150 | | | | -.0253 | -.1137 | -.1402 | -.1794 | | |
| .157 | | | | | | | | -.1620 | |
| .163 | | .0968 | | | | | | | |
| .177 | | | -.0015 | | | | | | |
| .229 | -.0989 | | | | | | | | |
| .246 | | .0074 | | | | | | | |
| .250 | | | | -.0632 | -.0677 | -.1016 | -.1332 | | |
| .274 | | | .0400 | | | | | | |
| .345 | | | | | | | | .0704 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1397 | | | | | | | |
| .400 | | | | .0000 | .2572 | | .0302 | | |
| .402 | | | .2016 | | | | | | |
| .418 | | | | | | | | | -.0746 |
| .497 | .0399 | | | | | | | | |
| .503 | | | | | | | | .1062 | |
| .550 | | | | .3053 | .4070 | | | | |
| .565 | | | .2924 | | | | | | |
| .600 | | | | | | | .3108 | | |
| .637 | | .0889 | | | | | | | |
| .650 | | | | | | .2806 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2170 | | | | |
| .725 | | | | .1480 | | | | | |
| .730 | | | | | | | | | -.2721 |
| .750 | | | | | | .1039 | .2709 | | |
| .760 | | | .0100 | | | | | | |
| .775 | | | | .0555 | .0878 | | | | |
| .798 | | -.0866 | | | | | | | |
| .808 | | | -.1293 | | | | | | |
| .834 | -.2289 | | | | | | | | |
| .839 | | -.2286 | | | | | | | |
| .850 | | | | -.1474 | -.1047 | -.0442 | | | |
| .857 | | | -.2589 | | | | | | |
| .862 | | | | | | | | -.0699 | |

ARC97-019 !AB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL33)

BETAO ( 1) = .348 ALPHAO( 3) = -.036

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.2219 | | | | | | | | |
| .879 | | -.2907 | | | | | | | |
| .900 | -.2367 | | | -.2482 | | | -.0654 | | |
| .905 | | | -.3553 | | | | | | |
| .919 | | -.3156 | | | | | | | |
| .950 | | | | -.3252 | -.2053 | -.1855 | | | |
| .953 | | | -.4077 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.3187 | | | | | | | | |
| 1.000 | | | -.3018 | | -.1852 | | -.2763 | | |

BETAO ( 1) = .366 ALPHAO( 4) = 4.233

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0966 | -.1218 | .2766 | .6757 | .6873 | .6687 | .6774 | .0865 | |
| .010 | -.0166 | -.0544 | .3383 | .2533 | .2316 | .2652 | .3823 | | |
| .020 | .0189 | .0096 | .0000 | .1922 | .2196 | .2066 | .2540 | .1431 | |
| .040 | | .0195 | .1459 | | | | | | |
| .050 | -.0527 | | | .0919 | .1119 | .2304 | .2619 | | |
| .069 | | | | | | | | .1428 | |
| .080 | | | | .1237 | | | | | |
| .091 | | | .0366 | | | | | | |
| .095 | | -.0034 | | | | | | | |
| .094 | .0667 | | | | | | | | |
| .150 | | | | .2134 | .3599 | .3229 | .2635 | | |
| .157 | | | | | | | | .1587 | |
| .163 | | .1164 | | | | | | | |
| .177 | | | .0497 | | | | | | |
| .229 | .0709 | | | | | | | | |
| .246 | | .1357 | | | | | | | |
| .260 | | | | .3275 | .2833 | .2640 | .2226 | | |
| .274 | | | .3447 | | | | | | |
| .345 | | | | | | | | .2743 | |
| .352 | .0000 | | | | | | | | |
| .390 | | .3298 | | | | | | | |
| .400 | | | | .0000 | .3285 | | .2920 | | |
| .402 | | | .3369 | | | | | | |
| .419 | | | | | | | | | -.2923 |
| .490 | .2651 | | | | | | | | |
| .503 | | | | | | | | .2143 | |
| .550 | | | | .3518 | .3921 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL33)

BETAO ( 1) = .366 ALPHAO( 4) = 4.233

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .3359 | | | | | | |
| .600 | | | | | | | .2714 | | |
| .637 | | .3308 | | | | | | | |
| .650 | | | | | | .2827 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2081 | | | | |
| .725 | | | | .1475 | | | | | |
| .730 | | | | | | | | | -.5127 |
| .750 | | | | | | .0961 | .2117 | | |
| .760 | | | -.0117 | | | | | | |
| .775 | | | | .0467 | .0834 | | | | |
| .798 | | -.0940 | | | | | | | |
| .808 | | | -.1446 | | | | | | |
| .834 | -.2301 | | | | | | | | |
| .839 | | -.2329 | | | | | | | |
| .850 | | | | -.1424 | -.1081 | -.0524 | | | |
| .857 | | | -.2695 | | | | | | |
| .862 | | | | | | | | -.1343 | |
| .865 | -.2187 | | | | | | | | |
| .879 | | -.2837 | | | | | | | |
| .900 | -.2158 | | | -.2353 | | | -.1016 | | |
| .905 | | | -.3640 | | | | | | |
| .919 | | -.3015 | | | | | | | |
| .950 | | | | -.3157 | -.2320 | -.1930 | | | |
| .953 | | | -.4121 | | | | | | |
| .956 | | .0000 | | | | | | | |
| .956 | -.3007 | | | | | | | | |
| 1.000 | | | -.2839 | | -.1779 | | -.3569 | | |

BETAO ( 1 = .403 ALPHAO( 5) = 8.510

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0459 | -.1496 | .3105 | .6754 | .7086 | .6891 | .6256 | -.0955 | |
| .010 | -.0029 | -.0645 | .4931 | .5303 | .5701 | .6521 | .6692 | | |
| .020 | -.0071 | .0131 | .0000 | .4268 | .5211 | .5575 | .5841 | .1221 | |
| .040 | | .0320 | .4240 | | | | | | |
| .050 | -.0081 | | | .3399 | .3989 | .4632 | .5205 | | |
| .069 | | | | | | | | .1986 | |
| .080 | | | | .3285 | | | | | |
| .081 | | | .2517 | | | | | | |
| .086 | | .1398 | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL33)

BETAO ( 1) = .403 ALPHAO( 5) = 8.510

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | .0980 | | | | | | | | |
| .150 | | | | .3187 | .3821 | .4150 | .4532 | | |
| .157 | | | | | | | | .2452 | |
| .163 | | .2682 | | | | | | | |
| .177 | | | .2722 | | | | | | |
| .229 | .1159 | | | | | | | | |
| .246 | | .2018 | | | | | | | |
| .250 | | | | .3370 | .3634 | .3940 | .4155 | | |
| .274 | | | .3250 | | | | | | |
| .345 | | | | | | | | .2351 | |
| .352 | .0000 | | | | | | | | |
| .390 | | .3345 | | | | | | | |
| .400 | | | | .0000 | .3928 | | .4384 | | |
| .402 | | | .3608 | | | | | | |
| .418 | | | | | | | | | -.4474 |
| .497 | .3121 | | | | | | | | |
| .503 | | | | | | | | .1945 | |
| .550 | | | | .3238 | .3702 | | | | |
| .555 | | | .3232 | | | | | | |
| .600 | | | | | | | .2504 | | |
| .637 | | .3325 | | | | | | | |
| .650 | | | | | | .2560 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1666 | | | | |
| .725 | | | | .0944 | | | | | |
| .730 | | | | | | | | | -.5451 |
| .750 | | | | | | .0761 | .2033 | | |
| .760 | | | -.0576 | | | | | | |
| .775 | | | | .0025 | .0462 | | | | |
| .799 | | -.1416 | | | | | | | |
| .808 | | | -.1734 | | | | | | |
| .834 | -.2139 | | | | | | | | |
| .839 | | -.2561 | | | | | | | |
| .850 | | | | -.1537 | -.1079 | -.0652 | | | |
| .857 | | | -.2902 | | | | | | |
| .882 | | | | | | | | -.1332 | |
| .885 | -.2154 | | | | | | | | |
| .879 | | -.2870 | | | | | | | |
| .900 | -.2144 | | | -.2400 | | | -.1015 | | |
| .905 | | | -.3684 | | | | | | |
| .919 | | -.2786 | | | | | | | |
| .950 | | | | -.3199 | -.2422 | -.1919 | | | |
| .953 | | | -.3967 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2805 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) LEFT WING BOT. (RETL33)

BETAO ( 1) = .403 ALPHAO( 5) = 8.510

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.2515 | | -.2360 | | -.4225 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL34) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.550 RN/FT = 2.500
ELV-IB = 8.000 ELV-OB = -4.000
RUDDER = .000 SPDBRK = .000

BETAO ( 1) = .403 ALPHAO( 1) = -8.292

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0099 | -.0338 | .2063 | .4876 | .4303 | .3980 | .4252 | -.3693 | |
| .010 | .0237 | -.0605 | -.0022 | -.2377 | -.3526 | -.2540 | -.2+51 | | |
| .020 | .0247 | -.0938 | .0000 | -.3497 | -.3876 | -.3968 | -.3993 | -.3765 | |
| .040 | | -.0818 | -.1758 | | | | | | |
| .050 | -.0533 | | | -.3388 | -.4135 | -.4344 | -.4318 | | |
| .069 | | | | | | | | -.3699 | |
| .080 | | | | -.3192 | | | | | |
| .081 | | | -.1026 | | | | | | |
| .086 | | -.0230 | | | | | | | |
| .094 | .0004 | | | | | | | | |
| .150 | | | | -.2406 | -.0169 | -.3898 | -.3832 | | |
| .157 | | | | | | | | -.3729 | |
| .163 | | .0136 | | | | | | | |
| .177 | | | -.0932 | | | | | | |
| .229 | -.1524 | | | | | | | | |
| .246 | | -.0527 | | | | | | | |
| .250 | | | | -.2001 | -.3380 | -.3707 | -.3610 | | |
| .274 | | | -.1657 | | | | | | |
| .345 | | | | | | | | -.3417 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0524 | | | | | | | |
| .400 | | | | .0000 | -.0202 | | -.2894 | | |
| .402 | | | .0751 | | | | | | |
| .418 | | | | | | | | | -.3024 |
| .497 | -.0524 | | | | | | | | |
| .503 | | | | | | | | -.3371 | |
| .550 | | | | .1159 | .1040 | | | | |
| .565 | | | .1339 | | | | | | |
| .600 | | | | | | | .1460 | | |
| .637 | | .1377 | | | | | | | |
| .650 | | | | | | .1138 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1043 | | | | |
| .725 | | | | .3445 | | | | | |
| .730 | | | | | | | | | -.2577 |
| .750 | | | | | | -.0397 | -.2381 | | |
| .760 | | | -.0409 | | | | | | |
| .775 | | | | .1413 | .1726 | | | | |

ARC97-019 !A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL34)

BETAO ( 1) = .403 ALPHAO( 1) = -6.292

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .798 | | -.0761 | | | | | | | |
| .808 | | | -.0084 | | | | | | |
| .834 | -.1740 | | | | | | | | |
| .839 | | -.0709 | | | | | | | |
| .850 | | | | -.0610 | -.0430 | -.1466 | | | |
| .857 | | | -.1293 | | | | | | |
| .862 | | | | | | | | -.2718 | |
| .865 | -.2183 | | | | | | | | |
| .879 | | -.1431 | | | | | | | |
| .900 | -.1767 | | | -.1855 | | | -.1954 | | |
| .905 | | | -.2287 | | | | | | |
| .919 | | -.2545 | | | | | | | |
| .950 | | | | -.2793 | -.2350 | -.2283 | | | |
| .953 | | | -.2998 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2506 | | | | | | | | |
| 1.000 | | | -.3038 | | -.2225 | | -.2762 | | |

BETAO ( 1) = .378 ALPHAO( 2) = -4.209

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | 0506 | -.0449 | .2323 | .5349 | .5051 | .4590 | .4728 | -.3237 | |
| .010 | -.0034 | -.0617 | .0503 | -.1507 | -.2801 | -.2122 | -.1848 | | |
| .020 | .0209 | -.0963 | .0000 | -.2658 | -.3220 | -.3542 | -.3530 | -.3852 | |
| .040 | | -.0827 | -.1302 | | | | | | |
| .050 | -.0605 | | | -.2581 | -.3575 | -.3952 | -.3765 | | |
| .069 | | | | | | | | -.3985 | |
| .080 | | | | -.2483 | | | | | |
| .081 | | | -.0716 | | | | | | |
| .086 | | -.0080 | | | | | | | |
| .094 | .0009 | | | | | | | | |
| .150 | | | | -.2009 | -.0371 | -.3305 | -.3563 | | |
| .157 | | | | | | | | -.4025 | |
| .163 | | .0211 | | | | | | | |
| .177 | | | -.0619 | | | | | | |
| .229 | -.1453 | | | | | | | | |
| .246 | | -.0347 | | | | | | | |
| .250 | | | | -.1747 | -.2807 | -.3243 | -.2985 | | |
| .274 | | | -.1551 | | | | | | |
| .345 | | | | | | | | -.3672 | |
| .362 | .0000 | | | | | | | | |

ARC97-019 IA81 LVAP:ALLHL SEALED) LEFT WING BOT. (RETL34)

BETAO ( 1) = .378 ALPHAO( 2) = -4.209

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .390 | | -.0486 | | | | | | | |
| .400 | | | | .0000 | .0956 | | -.2462 | | |
| .402 | | | .1097 | | | | | | |
| .418 | | | | | | | | | -.3739 |
| .497 | -.0527 | | | | | | | | |
| .503 | | | | | | | | -.2606 | |
| .550 | | | | .2082 | .1906 | | | | |
| .565 | | | .2053 | | | | | | |
| .600 | | | | | | | .1990 | | |
| .637 | | .1975 | | | | | | | |
| .650 | | | | | | .1866 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1593 | | | | |
| .725 | | | | .3471 | | | | | |
| .730 | | | | | | | | | -.2062 |
| .750 | | | | | | -.0058 | .0409 | | |
| .760 | | | -.0150 | | | | | | |
| .775 | | | | .1945 | .2354 | | | | |
| .799 | | -.0644 | | | | | | | |
| .808 | | | .0215 | | | | | | |
| .834 | -.1909 | | | | | | | | |
| .839 | | -.0931 | | | | | | | |
| .850 | | | | -.0338 | -.0197 | -.1315 | | | |
| .857 | | | -.1247 | | | | | | |
| .862 | | | | | | | | -.2735 | |
| .865 | -.1252 | | | | | | | | |
| .879 | | -.1356 | | | | | | | |
| .900 | -.1765 | | | -.1665 | | | -.1635 | | |
| .905 | | | -.2330 | | | | | | |
| .919 | | -.2388 | | | | | | | |
| .950 | | | | -.2675 | -.2366 | -.2174 | | | |
| .953 | | | -.2903 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2538 | | | | | | | | |
| 1.000 | | | -.3084 | | -.2254 | | -.2540 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL34)

BETAO ( 1) = .358 ALPHAO( 3) = -2.124

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | 3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0579 | -.0804 | .2358 | .5773 | .5388 | .5279 | .5446 | -.2371 | |
| .010 | -.0174 | -.0820 | .0891 | -.1054 | -.2091 | -.1506 | -.0972 | | |
| .020 | .0042 | -.1011 | .0000 | -.2186 | -.2613 | -.2839 | -.2772 | -.2049 | |
| .040 | | -.0656 | .0457 | | | | | | |
| .050 | -.0689 | | | -.2039 | -.2891 | -.3120 | -.3050 | | |
| .069 | | | | | | | | -.2584 | |
| .080 | | | | -.1965 | | | | | |
| .081 | | | -.0639 | | | | | | |
| .086 | | -.0196 | | | | | | | |
| .094 | .0117 | | | | | | | | |
| .150 | | | | -.0930 | -.0529 | -.2504 | -.2779 | | |
| .157 | | | | | | | | -.2761 | |
| .163 | | .0642 | | | | | | | |
| .177 | | | -.0290 | | | | | | |
| .229 | -.1482 | | | | | | | | |
| .245 | | -.0308 | | | | | | | |
| .250 | | | | -.1496 | -.1455 | -.2217 | -.2256 | | |
| .274 | | | -.1115 | | | | | | |
| .345 | | | | | | | | -.2175 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0056 | | | | | | | |
| .400 | | | | .0000 | .1748 | | -.1824 | | |
| .402 | | | .1925 | | | | | | |
| .418 | | | | | | | | | -.2542 |
| .497 | -.0399 | | | | | | | | |
| .503 | | | | | | | | -.0351 | |
| .550 | | | | .2518 | .2907 | | | | |
| .565 | | | .2495 | | | | | | |
| .600 | | | | | | | .1902 | | |
| .637 | | .2412 | | | | | | | |
| .650 | | | | | | .2454 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1880 | | | | |
| .725 | | | | -.2870 | | | | | |
| .730 | | | | | | | | | -.1090 |
| .750 | | | | | | .0050 | .0287 | | |
| .760 | | | .0124 | | | | | | |
| .775 | | | | .2261 | .2389 | | | | |
| .798 | | -.0311 | | | | | | | |
| .808 | | | .0292 | | | | | | |
| .834 | -.1945 | | | | | | | | |
| .839 | | -.0924 | | | | | | | |
| .850 | | | | -.0174 | -.0171 | -.1305 | | | |
| .857 | | | -.1198 | | | | | | |
| .862 | | | | | | | | -.1482 | |

ARC97-019 (A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL34)

BETAO ( 1) = .358 ALPHAO( 3) = -2.124

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.0999 | | | | | | | | |
| .879 | | -.1479 | | | | | | | |
| .900 | -.1651 | | | -.1542 | | | -.1654 | | |
| .905 | | | -.2396 | | | | | | |
| .919 | | -.2340 | | | | | | | |
| .950 | | | | -.2601 | -.2365 | -.2178 | | | |
| .953 | | | -.2959 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .955 | -.2642 | | | | | | | | |
| 1.000 | | | -.3085 | | -.2320 | | -.2754 | | |

BETAO ( 1) = .342 ALPHAO( 4) = -.027

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0671 | -.1022 | .2495 | .6112 | .6065 | .5881 | .5916 | -.1304 | |
| .010 | -.0195 | -.0951 | .1790 | -.0255 | -.1242 | -.0774 | .0031 | | |
| .020 | .0166 | -.0654 | .0000 | -.1305 | -.1677 | -.1989 | -.1976 | -.1787 | |
| .040 | | -.0212 | .1027 | | | | | | |
| .050 | -.0667 | | | -.1069 | -.1564 | -.2103 | -.2208 | | |
| .069 | | | | | | | | -.1467 | |
| .080 | | | | -.1289 | | | | | |
| .081 | | | -.0493 | | | | | | |
| .085 | | -.0154 | | | | | | | |
| .094 | .0205 | | | | | | | | |
| .150 | | | | -.0207 | -.0569 | -.1393 | -.1784 | | |
| .157 | | | | | | | | -.1343 | |
| .163 | | .0927 | | | | | | | |
| .177 | | | .0033 | | | | | | |
| .229 | -.1002 | | | | | | | | |
| .246 | | .0033 | | | | | | | |
| .250 | | | | -.0532 | -.0772 | -.0921 | -.1307 | | |
| .274 | | | .0737 | | | | | | |
| .345 | | | | | | | | .0333 | |
| .362 | .0000 | | | | | | | | |
| .380 | | .1425 | | | | | | | |
| .400 | | | | .0000 | .2468 | | .0010 | | |
| .402 | | | .2622 | | | | | | |
| .418 | | | | | | | | | -.0623 |
| .497 | .0462 | | | | | | | | |
| .503 | | | | | | | | .0865 | |
| .550 | | | | .3031 | .4137 | | | | |

ARC97-019 !A8! LVAP(ALLHL SEALED) LEFT WING BOT. (RETL34)

BETAO ( 1) = .342 ALPHAO( 41 = -.027

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/Bw | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/Cw | | | | | | | | | |
| .565 | | | .2861 | | | | | | |
| .600 | | | | | | | .3107 | | |
| .637 | | .2747 | | | | | | | |
| .650 | | | | | | .3009 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2105 | | | | |
| .725 | | | | .0156 | | | | | |
| .730 | | | | | | | | | -.1846 |
| .750 | | | | | | .0040 | .0291 | | |
| .760 | | | .0379 | | | | | | |
| .775 | | | | .2481 | .2567 | | | | |
| .799 | | -.0054 | | | | | | | |
| .808 | | | .0369 | | | | | | |
| .834 | -.1867 | | | | | | | | |
| .839 | | -.0820 | | | | | | | |
| .850 | | | | .0065 | -.0062 | -.1318 | | | |
| .857 | | | -.1077 | | | | | | |
| .862 | | | | | | | | -.1177 | |
| .865 | -.0911 | | | | | | | | |
| .879 | | -.1514 | | | | | | | |
| .900 | -.1467 | | | -.1348 | | | -.1663 | | |
| .905 | | | -.2351 | | | | | | |
| .919 | | -.2277 | | | | | | | |
| .950 | | | | -.2501 | -.2285 | -.2263 | | | |
| .953 | | | -.2987 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2664 | | | | | | | | |
| 1.000 | | | -.3100 | | -.2454 | | -.2873 | | |

BETAO ( 1) = .348 ALPHAO( 5) = 2.059

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/Bw | 2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/Cw | | | | | | | | | |
| 000 | -.0867 | -.1173 | .3093 | .6507 | .6606 | .6343 | .6289 | .0111 | |
| 010 | -.0293 | -.0476 | 3262 | .0769 | .0094 | .0471 | .1138 | | |
| 020 | 0401 | .0037 | 0000 | .0412 | .0643 | -.0252 | -.0867 | .0377 | |
| 040 | | .0079 | .1215 | | | | | | |
| 050 | -.0498 | | | -.0104 | -.0491 | -.0700 | -.0822 | | |
| 069 | | | | | | | | .0488 | |
| 080 | | | | -.0075 | | | | | |
| 081 | | | -.0168 | | | | | | |
| 096 | | -.0247 | | | | | | | |

ARC97-019 TAB1 LVAP(ALL HL SEALED) LEFT WING BOT. (RETL341)

BETAO ( 1) = .346 ALPHAO( 5) = 2.059

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | .0504 | | | | | | | | |
| .150 | | | | .0030 | -.0873 | .0113 | -.0014 | | |
| .157 | | | | | | | | .0397 | |
| .163 | | .1056 | | | | | | | |
| .177 | | | .0243 | | | | | | |
| .229 | .0507 | | | | | | | | |
| .246 | | .1072 | | | | | | | |
| .250 | | | | .2128 | .1839 | .1885 | .1044 | | |
| .274 | | | .2079 | | | | | | |
| .345 | | | | | | | | .2899 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .2546 | | | | | | | |
| .400 | | | | .0000 | .2927 | | .2888 | | |
| .402 | | | .3185 | | | | | | |
| .418 | | | | | | | | | -.0797 |
| .497 | .1804 | | | | | | | | |
| .503 | | | | | | | | .2373 | |
| .550 | | | | .3431 | .4611 | | | | |
| .555 | | | .3192 | | | | | | |
| .600 | | | | | | | .2957 | | |
| .637 | | .3121 | | | | | | | |
| .650 | | | | | | .3048 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0006 | | | | .2174 | | | | |
| .725 | | | | -.0101 | | | | | |
| .730 | | | | | | | | | -.4004 |
| .750 | | | | | | .0132 | -.0003 | | |
| .760 | | | .0565 | | | | | | |
| .775 | | | | .2838 | .2727 | | | | |
| .799 | | .0136 | | | | | | | |
| .808 | | | .0443 | | | | | | |
| .824 | -.1872 | | | | | | | | |
| .839 | | -.0776 | | | | | | | |
| .850 | | | | .0248 | .0054 | -.1273 | | | |
| .857 | | | -.0991 | | | | | | |
| .858 | | | | | | | | -.1821 | |
| .865 | -.0702 | | | | | | | | |
| .879 | | -.1681 | | | | | | | |
| .900 | -.1393 | | | -.1232 | | | -.1832 | | |
| .905 | | | -.2267 | | | | | | |
| .919 | | -.2306 | | | | | | | |
| .940 | | | | -.2423 | -.2199 | -.2393 | | | |
| .953 | | | -.2955 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2728 | | | | | | | | |

ARC97-019 IA8: LVAP(ALLML SEALED) LEFT WING BOT. (RETL34)

BETAO ( 1) = .346 ALPHAO( 5) = 2.059

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.3081 | | -.2533 | | -.3179 | | |

BETAO ( 1) = .356 ALPHAO( 6) = 3.707

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .006 | -.0885 | -.1219 | .2779 | .6715 | .6853 | .6723 | .6699 | .0868 | |
| .010 | -.0839 | -.0585 | .3353 | .2396 | .2129 | .2282 | .3491 | | |
| .020 | .0279 | .0023 | .0000 | .1838 | .2040 | .1574 | .2185 | .1427 | |
| .040 | | .0120 | .1500 | | | | | | |
| .050 | -.0444 | | | .1011 | .0818 | .1825 | .2444 | | |
| .069 | | | | | | | | .1401 | |
| .080 | | | | .1087 | | | | | |
| .081 | | | .0468 | | | | | | |
| .086 | | -.0105 | | | | | | | |
| .094 | .0696 | | | | | | | | |
| .150 | | | | .2409 | -.1028 | .3.84 | .2583 | | |
| .157 | | | | | | | | .1534 | |
| .163 | | .1058 | | | | | | | |
| .177 | | | .0719 | | | | | | |
| .229 | .0793 | | | | | | | | |
| .246 | | .1192 | | | | | | | |
| .250 | | | | .3150 | .2701 | .2609 | .2184 | | |
| .274 | | | .3324 | | | | | | |
| .345 | | | | | | | | .2684 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .3166 | | | | | | | |
| .400 | | | | .0000 | .3138 | | .2823 | | |
| .402 | | | .3324 | | | | | | |
| .418 | | | | | | | | | -.2780 |
| .497 | .2627 | | | | | | | | |
| .503 | | | | | | | | .2122 | |
| .550 | | | | .3477 | .4059 | | | | |
| .565 | | | .3270 | | | | | | |
| .600 | | | | | | | .2718 | | |
| .637 | | .3198 | | | | | | | |
| .650 | | | | | | .2908 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2089 | | | | |
| .725 | | | | -.0581 | | | | | |
| .730 | | | | | | | | | -.5016 |
| .750 | | | | | | .0027 | -.0153 | | |

REPRODUCED FROM ORIGINAL

ARC97-019 (AB) (VAP/ALLML SEALED) LEFT WING BOT. (RETL34)

BETAO ( 1) = .356 ALPHAO( 6) = 3.707

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BM | .2990 | .3540 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CM | | | | | | | | | |
| .760 | | | .0140 | | | | | | |
| .775 | | | | .2409 | .2693 | | | | |
| .798 | | -.0130 | | | | | | | |
| .808 | | | .0336 | | | | | | |
| .834 | -.1728 | | | | | | | | |
| .839 | | -.0925 | | | | | | | |
| .850 | | | | .0221 | .0018 | -.1373 | | | |
| .857 | | | -.1158 | | | | | | |
| .862 | | | | | | | | -.2035 | |
| .865 | -.0789 | | | | | | | | |
| .879 | | -.1650 | | | | | | | |
| .900 | -.1305 | | | -.1233 | | | -.1933 | | |
| .905 | | | -.2338 | | | | | | |
| .919 | | -.2208 | | | | | | | |
| .950 | | | | -.2447 | -.2214 | -.2526 | | | |
| .953 | | | -.2991 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2393 | | | | | | | | |
| 1.000 | | | -.3048 | | -.2864 | | -.3544 | | |

BETAO ( 1) = .369 ALPHAO( 7) = 6.242

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BM | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .887? | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CM | | | | | | | | | |
| .000 | -.0510 | -.1393 | .2530 | .7038 | .7120 | .6874 | .8436 | .0040 | |
| .010 | .0307 | -.0630 | .3545 | .4976 | .4643 | .5074 | .5329 | | |
| .020 | .0011 | -.0009 | .0000 | .4313 | .4208 | .4275 | .4252 | .1311 | |
| .040 | | .0110 | .2051 | | | | | | |
| .050 | -.0523 | | | .3482 | .2981 | .3610 | .3915 | | |
| .069 | | | | | | | | .1738 | |
| .080 | | | | .3222 | | | | | |
| .081 | | | .2270 | | | | | | |
| .085 | | .0756 | | | | | | | |
| .094 | .0508 | | | | | | | | |
| .150 | | | | .2486 | -.1031 | .3381 | .3553 | | |
| .157 | | | | | | | | .2125 | |
| .163 | | .1243 | | | | | | | |
| .177 | | | .2668 | | | | | | |
| 229 | .0983 | | | | | | | | |
| .246 | | .2191 | | | | | | | |
| 250 | | | | .3029 | .3088 | .3209 | .3133 | | |
| 274 | | | 2887 | | | | | | |

DATE 08 OCT 75 !A81B - PRESSURE SOURCE DATA TABULATION

ARC97-019 !A81 LVAP(ALLHL SEALED) LEFT WING BOT.

BETAO ( 1) = .369 ALPHAO( 7) = 6.242

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .2144 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .3099 | | | | | | | |
| .400 | | | | .0000 | .3645 | | .3735 | | |
| .402 | | | .3475 | | | | | | |
| .418 | | | | | | | | | -.4063 |
| .497 | .2994 | | | | | | | | |
| .503 | | | | | | | | .1796 | |
| .550 | | | | .3362 | .3598 | | | | |
| .565 | | | .3287 | | | | | | |
| .600 | | | | | | | .2509 | | |
| .637 | | .3264 | | | | | | | |
| .650 | | | | | | .2698 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1762 | | | | |
| .725 | | | | .0268 | | | | | |
| .730 | | | | | | | | | -.5393 |
| .750 | | | | | | -.0136 | -.0273 | | |
| .760 | | | -.0399 | | | | | | |
| .775 | | | | .2020 | .2462 | | | | |
| .798 | | -.0628 | | | | | | | |
| .809 | | | .0141 | | | | | | |
| .834 | -.1417 | | | | | | | | |
| .839 | | -.0897 | | | | | | | |
| .950 | | | | .0032 | -.0110 | -.1494 | | | |
| 857 | | | -.1251 | | | | | | |
| .862 | | | | | | | | -.2121 | |
| .865 | -.0835 | | | | | | | | |
| .879 | | -.1414 | | | | | | | |
| .900 | -.1472 | | | -.1336 | | | -.2014 | | |
| .905 | | | -.2270 | | | | | | |
| .919 | | -.2130 | | | | | | | |
| .950 | | | | -.2485 | - 2215 | -.2567 | | | |
| .953 | | | -.2765 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2207 | | | | | | | | |
| 1.000 | | | -.2843 | | -.3050 | | -.3836 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.550 RN/FT = 2.500
ELV-IB = 8.000 ELV-OB = -4.000
RUDDER = .000 SPOBRK = .000

ALPHAO( 1) = -6.333 BETAO ( 1) = -3.794

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0365 | .0405 | .3022 | .6516 | .5816 | .5363 | .5570 | -.3105 | |
| .010 | .1100 | -.0001 | .0967 | -.1384 | -.2782 | -.1914 | -.1783 | | |
| .020 | .0946 | -.0620 | .0000 | -.2686 | -.3204 | -.3527 | -.3569 | -.4290 | |
| .040 | | -.0812 | -.0734 | | | | | | |
| .050 | -.0085 | | | -.2868 | -.3516 | -.3893 | -.3907 | | |
| .069 | | | | | | | | -.4447 | |
| .080 | | | | -.2575 | | | | | |
| .081 | | | -.0417 | | | | | | |
| .086 | | .0486 | | | | | | | |
| .094 | .0670 | | | | | | | | |
| .150 | | | | -.2367 | -.3246 | -.3318 | -.3740 | | |
| .157 | | | | | | | | -.4538 | |
| .163 | | .1063 | | | | | | | |
| .177 | | | -.1444 | | | | | | |
| .229 | -.0946 | | | | | | | | |
| .246 | | -.1143 | | | | | | | |
| .250 | | | | -.1222 | -.2921 | -.3276 | -.3275 | | |
| .274 | | | -.1386 | | | | | | |
| .345 | | | | | | | | -.4679 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0427 | | | | | | | |
| .400 | | | | .0418 | -.1642 | | -.3066 | | |
| .402 | | | .0951 | | | | | | |
| .419 | | | | | | | | | -.3930 |
| .497 | -.0104 | | | | | | | | |
| .503 | | | | | | | | -.4966 | |
| .550 | | | | .1732 | .1459 | | | | |
| .565 | | | .1995 | | | | | | |
| .600 | | | | | | | -.2168 | | |
| .637 | | .2332 | | | | | | | |
| .650 | | | | | | .0695 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1267 | | | | |
| .725 | | | | .1566 | | | | | |
| .730 | | | | | | | | | -.4178 |
| .750 | | | | | | -.0181 | -.2751 | | |
| .762 | | | .0451 | | | | | | |
| .775 | | | | .2353 | .1930 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 1) = -6.333 BETAO ( 1) = -3.794

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .798 | | .0177 | | | | | | | |
| .808 | | | .0764 | | | | | | |
| .834 | -.0959 | | | | | | | | |
| .839 | | -.0051 | | | | | | | |
| .850 | | | | .0186 | .0119 | -.1124 | | | |
| .857 | | | -.0737 | | | | | | |
| .862 | | | | | | | | -.3888 | |
| .865 | -.0313 | | | | | | | | |
| .879 | | -.0822 | | | | | | | |
| .900 | -.1319 | | | -.1131 | | | -.2461 | | |
| .905 | | | -.1857 | | | | | | |
| .919 | | -.2133 | | | | | | | |
| .950 | | | | -.2206 | -.1930 | -.2018 | | | |
| .953 | | | -.2477 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .955 | -.2673 | | | | | | | | |
| 1.000 | | | -.2816 | | -.1885 | | -.2863 | | |

ALPHAO( 1) = -6.319 BETAO ( 2) = -1.683

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0125 | .0037 | .2491 | .5530 | .5179 | .4856 | .4039 | -.3436 | |
| .010 | .0408 | -.0239 | .0410 | -.1869 | -.3022 | -.2146 | -.2153 | | |
| .020 | .0572 | -.0728 | .0000 | -.3013 | -.3440 | -.3720 | -.3779 | -.4278 | |
| .040 | | -.0757 | -.1476 | | | | | | |
| .050 | -.0249 | | | -.3064 | -.3739 | -.4095 | -.4127 | | |
| .069 | | | | | | | | -.4521 | |
| .080 | | | | -.2809 | | | | | |
| .081 | | | -.0664 | | | | | | |
| .086 | | .0069 | | | | | | | |
| .094 | .0286 | | | | | | | | |
| .150 | | | | -.2561 | -.3508 | -.3458 | -.3930 | | |
| .157 | | | | | | | | -.4634 | |
| .163 | | -.0067 | | | | | | | |
| .177 | | | -.1254 | | | | | | |
| .229 | -.1083 | | | | | | | | |
| .245 | | -.1246 | | | | | | | |
| .250 | | | | -.1467 | -.3250 | -.3445 | -.3397 | | |
| .274 | | | -.1560 | | | | | | |
| .345 | | | | | | | | -.4756 | |
| .362 | .0000 | | | | | | | | |

ARC97-019 IA81 (VAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 1) = -6.319 BETAO ( 2) = -1.683

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .390 | | -.0611 | | | | | | | |
| .400 | | | | .0423 | -.0543 | | -.3314 | | |
| .402 | | | .0878 | | | | | | |
| .418 | | | | | | | | | -.4154 |
| .497 | -.0365 | | | | | | | | |
| .503 | | | | | | | | -.4740 | |
| .550 | | | | .1462 | .1303 | | | | |
| .565 | | | .1673 | | | | | | |
| .600 | | | | | | | -.1717 | | |
| .637 | | .1920 | | | | | | | |
| .650 | | | | | | .1104 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1012 | | | | |
| .725 | | | | .1233 | | | | | |
| .730 | | | | | | | | | -.3846 |
| .750 | | | | | | -.0282 | -.2364 | | |
| .760 | | | .0123 | | | | | | |
| .775 | | | | .1942 | .1620 | | | | |
| .798 | | -.0038 | | | | | | | |
| .808 | | | .0642 | | | | | | |
| .834 | -.0843 | | | | | | | | |
| .839 | | .0125 | | | | | | | |
| .850 | | | | -.0163 | -.0149 | -.1240 | | | |
| .857 | | | -.0789 | | | | | | |
| .862 | | | | | | | | -.3235 | |
| .865 | -.0496 | | | | | | | | |
| .879 | | -.0978 | | | | | | | |
| .900 | -.1472 | | | -.1495 | | | -.2966 | | |
| .905 | | | -.1879 | | | | | | |
| .919 | | -.2250 | | | | | | | |
| .950 | | | | -.2450 | -.2165 | -.2098 | | | |
| .953 | | | -.2727 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2753 | | | | | | | | |
| 1.000 | | | -.2937 | | -.1838 | | -.2982 | | |

ARC97-019 (AB) LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHA0( 1) = -6.080 BETA0 ( 3) = .391

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0081 | -.0305 | .2038 | .4853 | .4269 | .3930 | .4257 | -.3701 | |
| .010 | .0264 | -.0601 | -.0013 | -.2376 | -.3488 | -.2549 | -.2505 | | |
| .020 | .0251 | -.0945 | .0000 | -.3456 | -.3911 | -.4001 | -.3987 | -.3743 | |
| .040 | | -.0782 | -.1637 | | | | | | |
| .050 | -.0537 | | | -.3364 | -.4111 | -.4380 | -.4313 | | |
| .069 | | | | | | | | -.3762 | |
| .080 | | | | -.3204 | | | | | |
| .081 | | | -.1010 | | | | | | |
| .086 | | -.0194 | | | | | | | |
| .094 | .0032 | | | | | | | | |
| .150 | | | | -.2417 | -.3701 | -.3662 | -.3839 | | |
| .157 | | | | | | | | -.3710 | |
| .163 | | .0140 | | | | | | | |
| .177 | | | -.0938 | | | | | | |
| .229 | -.1525 | | | | | | | | |
| .246 | | -.0493 | | | | | | | |
| .250 | | | | -.1957 | -.3382 | -.3720 | -.3614 | | |
| .274 | | | -.1514 | | | | | | |
| .345 | | | | | | | | -.3448 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0499 | | | | | | | |
| .400 | | | | .0408 | -.0197 | | -.2987 | | |
| .402 | | | .0760 | | | | | | |
| .418 | | | | | | | | | -.2986 |
| .497 | .7444 | | | | | | | | |
| .503 | | | | | | | | -.3459 | |
| .550 | | | | .1236 | .1001 | | | | |
| .565 | | | .1351 | | | | | | |
| .600 | | | | | | | -.2425 | | |
| .637 | | .1391 | | | | | | | |
| .650 | | | | | | .1065 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1004 | | | | |
| .725 | | | | .0817 | | | | | |
| .730 | | | | | | | | | -.2571 |
| .750 | | | | | | -.0556 | -.2398 | | |
| .760 | | | -.0408 | | | | | | |
| .775 | | | | .1408 | .1659 | | | | |
| .798 | | -.0762 | | | | | | | |
| .808 | | | -.0062 | | | | | | |
| .834 | -.1744 | | | | | | | | |
| .839 | | -.0811 | | | | | | | |
| .850 | | | | -.0590 | -.0454 | -.1480 | | | |
| .857 | | | -.1278 | | | | | | |
| .862 | | | | | | | | -.2718 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 1) = -8.080 BETAO ( 3) = .391

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.1168 | | | | | | | | |
| .879 | | -.1405 | | | | | | | |
| .900 | -.1686 | | | -.1850 | | | -.1986 | | |
| .905 | | | -.2278 | | | | | | |
| .919 | | -.2520 | | | | | | | |
| .950 | | | | -.2773 | -.2366 | -.2283 | | | |
| .953 | | | -.2983 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2492 | | | | | | | | |
| 1.000 | | | -.3025 | | -.2250 | | -.2716 | | |

ALPHAO( 1) = -8.299 BETAO ( 4) = 2.522

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0441 | -.0592 | .1855 | .4375 | .3600 | .3271 | .3505 | -.3418 | |
| .010 | -.0334 | -.0793 | -.0011 | -.2624 | -.3811 | -.2878 | -.2896 | | |
| .020 | -.0321 | -.0686 | .0000 | -.3569 | -.4192 | -.4240 | -.4252 | -.3259 | |
| .040 | | -.0446 | -.0784 | | | | | | |
| .050 | -.0932 | | | -.3720 | -.4369 | -.4615 | -.4078 | | |
| .069 | | | | | | | | -.3137 | |
| .080 | | | | -.3455 | | | | | |
| .081 | | | -.1677 | | | | | | |
| .086 | | -.0621 | | | | | | | |
| .094 | -.0327 | | | | | | | | |
| .150 | | | | -.2069 | -.4024 | -.3746 | -.3875 | | |
| .157 | | | | | | | | -.2833 | |
| .163 | | -.0075 | | | | | | | |
| .177 | | | -.1378 | | | | | | |
| .229 | -.1097 | | | | | | | | |
| .248 | | -.0528 | | | | | | | |
| .250 | | | | -.1312 | -.2424 | -.3686 | -.3834 | | |
| .274 | | | -.0571 | | | | | | |
| .345 | | | | | | | | -.2352 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0335 | | | | | | | |
| .400 | | | | .0835 | .0084 | | -.2220 | | |
| .402 | | | .1189 | | | | | | |
| .418 | | | | | | | | | -.2038 |
| .497 | .8928 | | | | | | | | |
| .503 | | | | | | | | -.2559 | |
| .550 | | | | .0869 | .0585 | | | | |

ARC97-019 !A8! LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 1) = -6.299 BETAO ( 4) = 2.522

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .0826 | | | | | | |
| .600 | | | | | | | -.1707 | | |
| .637 | | .1044 | | | | | | | |
| .650 | | | | | | .1917 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0772 | | | | |
| .725 | | | | .0350 | | | | | |
| .730 | | | | | | | | | -.1568 |
| .750 | | | | | | -.0061 | -.1352 | | |
| .760 | | | -.1033 | | | | | | |
| .775 | | | | .0873 | .1109 | | | | |
| .798 | | -.1297 | | | | | | | |
| .809 | | | -.0196 | | | | | | |
| .834 | -.1773 | | | | | | | | |
| .839 | | -.0260 | | | | | | | |
| .850 | | | | -.1021 | -.0905 | -.1266 | | | |
| .857 | | | -.1105 | | | | | | |
| .862 | | | | | | | | -.2077 | |
| .865 | -.1493 | | | | | | | | |
| .879 | | -.1303 | | | | | | | |
| .900 | -.1650 | | | -.2108 | | | -.1468 | | |
| .905 | | | -.2318 | | | | | | |
| .919 | | -.2069 | | | | | | | |
| .950 | | | | -.2911 | -.2547 | -.2126 | | | |
| .953 | | | -.3045 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2044 | | | | | | | | |
| 1.000 | | | -.2702 | | -.2331 | | -.2175 | | |

ALPHAO( 1) = -6.042 BETAO ( 5) = 4.587

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0853 | -.0754 | .1774 | .3862 | .4155 | .3548 | .3774 | -.0810 | |
| .010 | -.0809 | -.0858 | .0419 | -.2911 | -.3723 | -.2873 | -.2735 | | |
| .020 | -.0800 | -.0508 | .0000 | -.3882 | -.4165 | -.4239 | -.2400 | -.0817 | |
| .040 | | -.0423 | -.1233 | | | | | | |
| .050 | -.1253 | | | -.3777 | -.4333 | -.3738 | -.2394 | | |
| .069 | | | | | | | | -.0785 | |
| .080 | | | | -.3624 | | | | | |
| .081 | | | -.2098 | | | | | | |
| .088 | | -.0725 | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHA0( 1) = -6.042 BETA0 ( 51) = 4.587

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0060 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0697 | | | | | | | | |
| .150 | | | | -.1319 | -.3774 | -.3422 | -.2432 | | |
| .157 | | | | | | | | -.0975 | |
| .163 | | -.0608 | | | | | | | |
| .177 | | | -.0874 | | | | | | |
| .229 | -.0857 | | | | | | | | |
| .246 | | -.0709 | | | | | | | |
| .250 | | | | .0122 | .0427 | -.2542 | -.2790 | | |
| .274 | | | .0284 | | | | | | |
| .345 | | | | | | | | -.1253 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0645 | | | | | | | |
| .400 | | | | .1847 | .2065 | | -.2900 | | |
| .402 | | | .1490 | | | | | | |
| .418 | | | | | | | | | -.0870 |
| .497 | .0405 | | | | | | | | |
| .503 | | | | | | | | -.1582 | |
| .550 | | | | .1381 | .0971 | | | | |
| .565 | | | .1733 | | | | | | |
| .600 | | | | | | | -.1556 | | |
| .637 | | .1349 | | | | | | | |
| .650 | | | | | | .0866 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0752 | | | | |
| .725 | | | | -.0290 | | | | | |
| .730 | | | | | | | | | -.0989 |
| .750 | | | | | | -.0917 | -.0410 | | |
| .760 | | | -.1617 | | | | | | |
| .775 | | | | .0570 | .1273 | | | | |
| .798 | | -.1133 | | | | | | | |
| .808 | | | -.0334 | | | | | | |
| .834 | -.1494 | | | | | | | | |
| .839 | | -.0771 | | | | | | | |
| .850 | | | | -.1059 | -.0877 | -.2020 | | | |
| .857 | | | -.1242 | | | | | | |
| .862 | | | | | | | | -.1908 | |
| .865 | -.1208 | | | | | | | | |
| .879 | | -.1661 | | | | | | | |
| .900 | -.1394 | | | -.1979 | | | -.1938 | | |
| .905 | | | -.2274 | | | | | | |
| .919 | | -.2181 | | | | | | | |
| .950 | | | | -.2776 | -.2285 | -.2607 | | | |
| .953 | | | -.2662 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1807 | | | | | | | | |

ARC97-019 !A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 1) = -6.042 BETAO ( 5) = 4.587

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1582 | | - 2667 | | -.1854 | | |

ALPHAO( 2) = -4.215 BETAO ( 1) = -5.870

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0636 | .0650 | .3526 | .7212 | .6729 | .6385 | .6599 | -.2242 | |
| .010 | .0908 | .0337 | .1476 | -.0626 | - 1819 | -.1227 | -.0840 | | |
| .020 | .1257 | -.0266 | .0000 | -.1964 | -.2377 | -.2771 | -.2855 | -.3498 | |
| .040 | | -.0402 | -.0657 | | | | | | |
| .050 | .0334 | | | -.2098 | -.2698 | -.3102 | -.3167 | | |
| .069 | | | | | | | | -.3755 | |
| .080 | | | | -.1825 | | | | | |
| .081 | | | .0456 | | | | | | |
| .086 | | .0934 | | | | | | | |
| .094 | .0425 | | | | | | | | |
| .150 | | | | -.1526 | .5017 | -.2667 | -.2966 | | |
| .157 | | | | | | | | -.3612 | |
| .163 | | -.0370 | | | | | | | |
| .177 | | | .0089 | | | | | | |
| .229 | -.0568 | | | | | | | | |
| .246 | | -.0580 | | | | | | | |
| .250 | | | | -.0917 | -.2050 | -.2384 | -.2658 | | |
| .274 | | | -.0889 | | | | | | |
| .345 | | | | | | | | -.3485 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0128 | | | | | | | |
| .400 | | | | .0000 | -.1125 | | -.2210 | | |
| .402 | | | .1279 | | | | | | |
| .418 | | | | | | | | | -.3092 |
| .497 | .0191 | | | | | | | | |
| .503 | | | | | | | | -.3036 | |
| .550 | | | | .3055 | .2414 | | | | |
| .555 | | | .3202 | | | | | | |
| .600 | | | | | | | -.1081 | | |
| .637 | | .3392 | | | | | | | |
| .650 | | | | | | .1811 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2150 | | | | |
| .725 | | | | .2354 | | | | | |
| .730 | | | | | | | | | -.3300 |
| .750 | | | | | | .0281 | -.1328 | | |

ARC97-019 IA81 LVAP(ALL SL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 2) = -4.215 BETAO ( 1) = -5.870

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .0819 | | | | | | |
| .775 | | | | .3131 | .2649 | | | | |
| .798 | | .0566 | | | | | | | |
| .808 | | | .1209 | | | | | | |
| .834 | -.1094 | | | | | | | | |
| .839 | | -.0099 | | | | | | | |
| .850 | | | | .0819 | .0509 | -.0769 | | | |
| .857 | | | -.0348 | | | | | | |
| .862 | | | | | | | | -.2845 | |
| .865 | -.0023 | | | | | | | | |
| .879 | | -.0754 | | | | | | | |
| .900 | -.0971 | | | -.0702 | | | -.1191 | | |
| .905 | | | -.1689 | | | | | | |
| .919 | | -.1720 | | | | | | | |
| .950 | | | | -.1985 | -.1673 | -.1721 | | | |
| .953 | | | -.2297 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .955 | -.2503 | | | | | | | | |
| 1.000 | | | -.2702 | | -.2150 | | -.2502 | | |

ALPHAO( 2) = -4.211 BETAO ( 2) = -3.827

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0389 | .0313 | .3163 | .6657 | .6108 | .5782 | .6003 | -.2582 | |
| .010 | .1064 | .0024 | .1218 | - 0966 | -.2192 | -.1506 | -.1219 | | |
| .020 | .0850 | -.0537 | .0000 | -.2203 | -.2712 | -.3031 | -.3102 | -.3777 | |
| .040 | | -.0620 | .0183 | | | | | | |
| .050 | -.0102 | | | -.2349 | -.3039 | -.3384 | -.3407 | | |
| .069 | | | | | | | | -.4005 | |
| .080 | | | | -.2120 | | | | | |
| .091 | | | -.0322 | | | | | | |
| .096 | | .0494 | | | | | | | |
| .094 | .0437 | | | | | | | | |
| .150 | | | | -.2076 | .4389 | -.2963 | -.3219 | | |
| 157 | | | | | | | | -.3926 | |
| .163 | | .1104 | | | | | | | |
| 177 | | | -.0701 | | | | | | |
| 229 | -.0755 | | | | | | | | |
| .246 | | -.1033 | | | | | | | |
| .250 | | | | -.1135 | -.2346 | -.2693 | -.2888 | | |
| .274 | | | -.1270 | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL39)

ALPHAO( 2) = -4.211 BETAO ( 2) = -3.827

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .8720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | -.3913 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0240 | | | | | | | |
| .400 | | | | .0000 | -.1449 | | -.2475 | | |
| .402 | | | .0932 | | | | | | |
| .418 | | | | | | | | | -.3433 |
| .497 | .0024 | | | | | | | | |
| .503 | | | | | | | | -.3152 | |
| .550 | | | | .2360 | .1943 | | | | |
| .565 | | | .2407 | | | | | | |
| .600 | | | | | | | -.1318 | | |
| .637 | | .2582 | | | | | | | |
| .650 | | | | | | .1403 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1873 | | | | |
| .725 | | | | -.3837 | | | | | |
| .730 | | | | | | | | | -.3764 |
| .750 | | | | | | .0148 | -.1833 | | |
| .760 | | | .0681 | | | | | | |
| .775 | | | | .2750 | .2375 | | | | |
| .798 | | .0392 | | | | | | | |
| .808 | | | .0944 | | | | | | |
| .834 | -.1418 | | | | | | | | |
| .839 | | -.0289 | | | | | | | |
| .850 | | | | .0505 | .0296 | -.0871 | | | |
| .857 | | | -.0653 | | | | | | |
| .862 | | | | | | | | -.2955 | |
| .865 | -.0323 | | | | | | | | |
| .879 | | -.0933 | | | | | | | |
| .900 | -.1230 | | | -.0876 | | | -.1318 | | |
| .905 | | | -.1797 | | | | | | |
| .919 | | -.1986 | | | | | | | |
| .950 | | | | -.2096 | -.1786 | -.1833 | | | |
| .953 | | | -.2423 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2642 | | | | | | | | |
| 1.000 | | | -.2838 | | -.2028 | | -.2883 | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHA0( 2) = -4.194 BETA0 ( 3) = .385

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0526 | -.0407 | .2303 | .5151 | .5007 | .4587 | .4732 | -.3254 | |
| .010 | -.0004 | -.0581 | .0488 | -.1571 | -.2789 | -.2108 | -.1855 | | |
| .020 | .0227 | -.0932 | .0000 | -.2635 | -.3239 | -.3583 | -.3533 | -.3815 | |
| .040 | | -.0752 | -.1267 | | | | | | |
| .050 | -.0588 | | | -.2598 | -.3573 | -.3902 | -.3852 | | |
| .069 | | | | | | | | -.4007 | |
| .080 | | | | -.2519 | | | | | |
| .081 | | | -.0717 | | | | | | |
| .086 | | -.0092 | | | | | | | |
| .094 | .0019 | | | | | | | | |
| .150 | | | | -.2019 | -.0427 | -.3315 | -.3598 | | |
| .157 | | | | | | | | -.4089 | |
| .163 | | .0246 | | | | | | | |
| .177 | | | -.0656 | | | | | | |
| .229 | -.1400 | | | | | | | | |
| .246 | | -.0361 | | | | | | | |
| .250 | | | | -.1784 | -.2769 | -.3250 | -.3033 | | |
| .274 | | | -.1567 | | | | | | |
| .345 | | | | | | | | -.3749 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0461 | | | | | | | |
| .400 | | | | .0000 | .0933 | | -.2570 | | |
| .402 | | | .1114 | | | | | | |
| .418 | | | | | | | | | -.3799 |
| .497 | -.0504 | | | | | | | | |
| .503 | | | | | | | | -.2889 | |
| .550 | | | | .2069 | .1881 | | | | |
| .565 | | | .2071 | | | | | | |
| .600 | | | | | | | -.0965 | | |
| .637 | | .1991 | | | | | | | |
| .650 | | | | | | .1806 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1566 | | | | |
| .725 | | | | -.1189 | | | | | |
| .730 | | | | | | | | | -.2127 |
| .750 | | | | | | -.0151 | .0438 | | |
| .760 | | | -.0180 | | | | | | |
| .775 | | | | .1938 | .2343 | | | | |
| .798 | | -.0679 | | | | | | | |
| .808 | | | .0199 | | | | | | |
| .834 | -.1864 | | | | | | | | |
| .839 | | -.0887 | | | | | | | |
| .850 | | | | -.0353 | -.0189 | -.1308 | | | |
| .857 | | | -.1241 | | | | | | |
| .862 | | | | | | | | -.2794 | |

ARC97-019 TAB1 (VAP(ALLHL SEALED) LEFT WING BOT. (REF.35)

ALPHA0( 2) = -4.194 BETA0 ( 3) = .313

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.1208 | | | | | | | | |
| .879 | | -.1333 | | | | | | | |
| .900 | -.1679 | | | -.1664 | | | - 1622 | | |
| .905 | | | -.2322 | | | | | | |
| .919 | | -.2393 | | | | | | | |
| .950 | | | | -.2676 | -.2347 | -.2161 | | | |
| .953 | | | -.2907 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2529 | | | | | | | | |
| 1.000 | | | -.3061 | | -.2229 | | -.2525 | | |

ALPHA0( 2) = -4.155 BETA0 ( 4) = 4.561

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | 2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1008 | - 0914 | .1796 | .4185 | .4476 | .4331 | .4737 | -.1534 | |
| .010 | -.0951 | -.0750 | .0742 | -.2221 | -.3104 | -.2075 | -.1707 | | |
| .020 | -.0879 | -.0502 | .0000 | -.3310 | -.3451 | -.1654 | -.2016 | -.1273 | |
| .040 | | -.0431 | -.0883 | | | | | | |
| .050 | -.1152 | | | -.2753 | -.2988 | -.1616 | -.2042 | | |
| .069 | | | | | | | | -.1433 | |
| .080 | | | | -.2447 | | | | | |
| .081 | | | -.0806 | | | | | | |
| .086 | | -.0367 | | | | | | | |
| .094 | -.0970 | | | | | | | | |
| .150 | | | | -.0821 | -.3849 | -.1349 | -.1703 | | |
| .157 | | | | | | | | -.1267 | |
| .163 | | -.0576 | | | | | | | |
| .177 | | | -.0117 | | | | | | |
| .229 | -.0788 | | | | | | | | |
| 246 | | .0199 | | | | | | | |
| 250 | | | | .3302 | .1943 | -.1092 | -.1123 | | |
| .274 | | | .1006 | | | | | | |
| .345 | | | | | | | | -.1459 | |
| .352 | .0000 | | | | | | | | |
| 390 | | .1149 | | | | | | | |
| .400 | | | | .0000 | .1121 | | -.0504 | | |
| .402 | | | .2607 | | | | | | |
| .419 | | | | | | | | | -.0850 |
| .497 | 0649 | | | | | | | | |
| .503 | | | | | | | | -.0712 | |
| .550 | | | | .1193 | .0883 | | | | |

ARC97-019 TAB1 EVAP(ALLML SEALED) LEFT WING BOT. (RETL35)

ALPHA0( 2) = -4.155 BETA0 ( 4) = 4.561

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| X/CW \ Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| .565 | | | .1458 | | | | | | |
| .600 | | | | | | | -.0106 | | |
| .637 | | .1458 | | | | | | | |
| .650 | | | | | | .1900 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1178 | | | | |
| .725 | | | | .2086 | | | | | |
| .730 | | | | | | | | | -.0977 |
| .750 | | | | | | -.0659 | -.0227 | | |
| .760 | | | -.1472 | | | | | | |
| .775 | | | | .0853 | .1442 | | | | |
| .798 | | -.1283 | | | | | | | |
| .808 | | | -.0281 | | | | | | |
| .834 | -.1406 | | | | | | | | |
| .839 | | -.0608 | | | | | | | |
| .850 | | | | -.0999 | -.0777 | -.1860 | | | |
| .857 | | | -.1151 | | | | | | |
| .862 | | | | | | | | -.1371 | |
| .865 | -.1091 | | | | | | | | |
| .879 | | -.1659 | | | | | | | |
| .900 | -.1419 | | | -.2002 | | | -.2069 | | |
| .905 | | | -.2258 | | | | | | |
| .919 | | -.2232 | | | | | | | |
| .950 | | | | -.2786 | -.2452 | -.2575 | | | |
| .953 | | | -.2776 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .955 | -.1907 | | | | | | | | |
| 1.000 | | | -.1946 | | -.2592 | | -.2203 | | |

ALPHA0( 2) = -4.139 BETA0 ( 5) = 6.623

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| X/CW \ Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| .000 | -.1414 | -.0618 | .2499 | .4690 | .3899 | .3517 | .4126 | -.2114 | |
| .010 | -.1394 | .0001 | .1921 | -.1842 | -.3194 | -.2452 | -.2111 | | |
| .020 | -.1368 | -.0064 | .0100 | -.2639 | -.3441 | -.2182 | -.2817 | -.1840 | |
| .040 | | .0049 | .0510 | | | | | | |
| .050 | -.1316 | | | -.1842 | -.2891 | -.2210 | -.2684 | | |
| .059 | | | | | | | | -.1722 | |
| .080 | | | | -.0871 | | | | | |
| .081 | | | -.0037 | | | | | | |
| .085 | | .0478 | | | | | | | |

ARC97-019 TAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHA0( 21 = -4.139 BETA0 ( 51 = 6.623

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.1423 | | | | | | | | |
| .150 | | | | .0598 | -.4367 | -.2043 | -.2308 | | |
| .157 | | | | | | | | -.1595 | |
| .163 | | .1241 | | | | | | | |
| .177 | | | .0678 | | | | | | |
| .229 | -.0610 | | | | | | | | |
| .246 | | .0215 | | | | | | | |
| .250 | | | | .1607 | .0672 | -.0810 | -.1099 | | |
| .274 | | | .1742 | | | | | | |
| .345 | | | | | | | | -.1716 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1818 | | | | | | | |
| .400 | | | | .0000 | .1083 | | -.0387 | | |
| .402 | | | .1968 | | | | | | |
| .418 | | | | | | | | | -.0974 |
| .497 | .1456 | | | | | | | | |
| .503 | | | | | | | | -.0880 | |
| .550 | | | | .1187 | .1086 | | | | |
| .565 | | | .1449 | | | | | | |
| .600 | | | | | | | .0187 | | |
| .637 | | .1417 | | | | | | | |
| .650 | | | | | | .1184 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0336 | | | | |
| .725 | | | | -.0852 | | | | | |
| .730 | | | | | | | | | -.0981 |
| .750 | | | | | | -.0803 | -.0430 | | |
| .760 | | | -.1850 | | | | | | |
| .775 | | | | -.0291 | .1076 | | | | |
| .798 | | -.1176 | | | | | | | |
| .808 | | | -.0620 | | | | | | |
| .834 | -.1586 | | | | | | | | |
| .839 | | -.1192 | | | | | | | |
| .850 | | | | -.1300 | -.0972 | -.2069 | | | |
| .857 | | | -.1708 | | | | | | |
| .862 | | | | | | | | -.1769 | |
| .865 | -.1283 | | | | | | | | |
| .879 | | -.2028 | | | | | | | |
| .900 | -.1618 | | | -.2071 | | | -.2261 | | |
| .905 | | | -.2720 | | | | | | |
| .919 | | -.2369 | | | | | | | |
| .950 | | | | -.2911 | -.2482 | -.2755 | | | |
| .953 | | | -.2919 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1878 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 2) = -4.139 BETAO ( 5) = 6.623

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1232 | | -.2686 | | -.2140 | | |

ALPHAO( 3) = -2.110 BETAO ( 1) = -5.871

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0569 | .0606 | .3597 | .7372 | .7050 | .6791 | .6947 | -.1386 | |
| .010 | .0405 | .0408 | .2029 | -.0131 | -.1195 | -.0742 | -.0111 | | |
| .020 | .1057 | -.0136 | .0000 | -.1455 | -.1741 | -.2090 | -.2150 | -.2410 | |
| .040 | | -.0292 | -.0159 | | | | | | |
| .050 | .0415 | | | -.1208 | -.2010 | -.2423 | -.2464 | | |
| .069 | | | | | | | | -.2643 | |
| .080 | | | | -.1208 | | | | | |
| .081 | | | .0379 | | | | | | |
| .086 | | .1044 | | | | | | | |
| .094 | .0605 | | | | | | | | |
| .150 | | | | -.1234 | -.1667 | -.1921 | -.2212 | | |
| .157 | | | | | | | | -.2390 | |
| .163 | | -.0059 | | | | | | | |
| .177 | | | -.0227 | | | | | | |
| .229 | -.0516 | | | | | | | | |
| .246 | | -.0628 | | | | | | | |
| .250 | | | | -.0538 | -.1331 | -.1568 | -.1865 | | |
| .274 | | | -.0648 | | | | | | |
| .345 | | | | | | | | -.2223 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0161 | | | | | | | |
| .400 | | | | .0000 | -.0139 | | -.1380 | | |
| .402 | | | .1875 | | | | | | |
| .418 | | | | | | | | | -.2009 |
| .497 | .0323 | | | | | | | | |
| .503 | | | | | | | | -.1869 | |
| .550 | | | | .3759 | .3351 | | | | |
| .565 | | | .4199 | | | | | | |
| .600 | | | | | | | .1047 | | |
| .637 | | .4443 | | | | | | | |
| .650 | | | | | | .3122 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2454 | | | | |
| .725 | | | | -.4150 | | | | | |
| .730 | | | | | | | | | -.2514 |
| .750 | | | | | | .0380 | .0381 | | |

ARC97-019 IAB1 LVAP:ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 3) = -2.110 BETAO ( 1) = -5.871

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .1031 | | | | | | |
| .775 | | | | .3490 | .3005 | | | | |
| .798 | | .0815 | | | | | | | |
| .808 | | | .1458 | | | | | | |
| .834 | -.1204 | | | | | | | | |
| .839 | | -.0027 | | | | | | | |
| .850 | | | | .1077 | .0624 | -.0773 | | | |
| .857 | | | -.0181 | | | | | | |
| .862 | | | | | | | | -.0542 | |
| .865 | -.0113 | | | | | | | | |
| .879 | | -.0709 | | | | | | | |
| .900 | -.0814 | | | -.0548 | | | - 0918 | | |
| .905 | | | -.1608 | | | | | | |
| .919 | | -.1615 | | | | | | | |
| .950 | | | | -.1881 | -.1560 | -.1659 | | | |
| .953 | | | -.2282 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2439 | | | | | | | | |
| 1.000 | | | -.2891 | | -.2590 | | -.2554 | | |

ALPHAO( 3) = -2.109 BETAO ( 2) = -1.724

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0172 | -.0319 | .2782 | .6304 | .5980 | .5882 | .6011 | -.2056 | |
| .010 | .0323 | -.0280 | .1407 | -.0793 | -.1817 | -.1215 | -.0660 | | |
| .020 | .0271 | -.0055 | .0000 | -.1989 | -.2391 | -.2578 | -.2559 | -.2867 | |
| .040 | | .0253 | .0396 | | | | | | |
| .050 | -.0469 | | | -.2049 | -.2628 | -.2902 | -.2860 | | |
| .069 | | | | | | | | -.2812 | |
| .080 | | | | -.1906 | | | | | |
| .081 | | | -.0642 | | | | | | |
| .086 | | -.0036 | | | | | | | |
| .094 | .0336 | | | | | | | | |
| .150 | | | | -.1877 | -.2205 | -.2445 | -.2594 | | |
| .157 | | | | | | | | -.2619 | |
| .163 | | .0790 | | | | | | | |
| .177 | | | -.0205 | | | | | | |
| .229 | -.0388 | | | | | | | | |
| .246 | | -.1037 | | | | | | | |
| .250 | | | | -.1003 | -.1785 | -.2010 | -.2098 | | |
| .274 | | | -.0934 | | | | | | |

ARC97-019 (A81 LVAPIALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHA0( 3) = -2.109 BETA0 ( 2) = -1.724

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | -.2528 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0322 | | | | | | | |
| .400 | | | | .0000 | .1293 | | -.1841 | | |
| .402 | | | .1715 | | | | | | |
| .418 | | | | | | | | | -.2473 |
| .497 | -.0118 | | | | | | | | |
| .503 | | | | | | | | -.1708 | |
| .550 | | | | .2945 | .3276 | | | | |
| .565 | | | .2766 | | | | | | |
| .600 | | | | | | | .0279 | | |
| .637 | | .2813 | | | | | | | |
| .650 | | | | | | .2864 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2112 | | | | |
| .725 | | | | .3237 | | | | | |
| .730 | | | | | | | | | -.1797 |
| .750 | | | | | | .0045 | .0364 | | |
| .760 | | | .0640 | | | | | | |
| .775 | | | | .2710 | .2268 | | | | |
| .798 | | .0332 | | | | | | | |
| .808 | | | .0791 | | | | | | |
| .834 | -.1570 | | | | | | | | |
| .839 | | -.0373 | | | | | | | |
| .850 | | | | .0339 | .0112 | -.1108 | | | |
| .857 | | | -.0745 | | | | | | |
| .862 | | | | | | | | -.1263 | |
| .865 | -.0540 | | | | | | | | |
| .879 | | -.1175 | | | | | | | |
| .900 | -.1161 | | | -.1037 | | | -.1209 | | |
| .905 | | | -.1962 | | | | | | |
| .919 | | -.2057 | | | | | | | |
| .950 | | | | -.2122 | -.1960 | -.2042 | | | |
| .953 | | | -.2489 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2724 | | | | | | | | |
| 1.000 | | | -.3916 | | -.2126 | | -.2753 | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 3) = -2.081 BETAO ( 3) = 2.471

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0909 | -.0943 | .2503 | .5350 | .4941 | .4744 | .5708 | -.2132 | |
| .010 | -.0500 | -.0928 | .1717 | -.1274 | -.2269 | -.1749 | -.0743 | | |
| .020 | -.0292 | -.0791 | .0000 | -.2384 | -.2791 | -.3009 | -.2732 | -.2376 | |
| .040 | | -.0548 | -.0094 | | | | | | |
| .050 | -.0820 | | | -.2353 | -.2971 | -.3223 | -.2799 | | |
| .069 | | | | | | | | -.2174 | |
| .080 | | | | -.2031 | | | | | |
| .081 | | | -.1163 | | | | | | |
| .086 | | -.0440 | | | | | | | |
| .094 | -.0545 | | | | | | | | |
| .150 | | | | -.1186 | -.2348 | -.2524 | -.2326 | | |
| .157 | | | | | | | | .0066 | |
| .163 | | .0035 | | | | | | | |
| .177 | | | -.0742 | | | | | | |
| .229 | -.0971 | | | | | | | | |
| .246 | | -.0295 | | | | | | | |
| .250 | | | | .1182 | .1092 | -.1034 | -.1658 | | |
| .274 | | | .0650 | | | | | | |
| .345 | | | | | | | | .0229 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1085 | | | | | | | |
| .400 | | | | .0000 | .1595 | | .1779 | | |
| .402 | | | .2064 | | | | | | |
| .418 | | | | | | | | | -.1979 |
| .497 | .0438 | | | | | | | | |
| .503 | | | | | | | | .1110 | |
| .550 | | | | .1715 | .2074 | | | | |
| .565 | | | .1688 | | | | | | |
| .600 | | | | | | | .2732 | | |
| .637 | | .1617 | | | | | | | |
| .650 | | | | | | .2998 | | | |
| .670 | | | | | | | | .0034 | |
| .700 | .0000 | | | | .2062 | | | | |
| .725 | | | | .2883 | | | | | |
| .730 | | | | | | | | | -.0299 |
| .750 | | | | | | -.0330 | .0004 | | |
| .760 | | | -.0799 | | | | | | |
| .775 | | | | .1434 | .2265 | | | | |
| .798 | | -.1164 | | | | | | | |
| .808 | | | -.0182 | | | | | | |
| .834 | -.1332 | | | | | | | | |
| .839 | | -.0681 | | | | | | | |
| .850 | | | | -.0513 | -.0228 | -.1395 | | | |
| .857 | | | -.1333 | | | | | | |
| .862 | | | | | | | | -.1115 | |

ARC97-019 IA81 LVAPIALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 3) = -2.081 BETAO ( 3) = 2.471

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.1080 | | | | | | | | |
| .879 | | -.1613 | | | | | | | |
| .900 | -.1707 | | | -.1691 | | | -.1651 | | |
| .905 | | | -.2285 | | | | | | |
| .919 | | -.2530 | | | | | | | |
| .950 | | | | -.2699 | -.2204 | -.2342 | | | |
| .953 | | | -.2965 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .955 | -.2080 | | | | | | | | |
| 1.000 | | | -.2554 | | -.2163 | | -.2479 | | |

ALPHAO( 3) = -2.052 BETAO ( 4) = 6.607

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1677 | .0223 | .2594 | .5578 | .4856 | .4318 | .4826 | -.1753 | |
| .010 | -.1556 | .0364 | .2325 | -.0621 | -.1886 | -.1486 | -.1024 | | |
| .020 | -.1453 | .0575 | .0000 | -.0741 | -.1736 | -.2297 | -.2679 | -.1523 | |
| .040 | | .0699 | .1291 | | | | | | |
| .050 | -.1203 | | | -.0501 | -.1250 | -.1806 | -.2375 | | |
| .059 | | | | | | | | -.1429 | |
| .080 | | | | .0106 | | | | | |
| .081 | | | .0773 | | | | | | |
| .085 | | .0776 | | | | | | | |
| .094 | -.1530 | | | | | | | | |
| .150 | | | | .2400 | .0393 | -.0148 | -.1554 | | |
| .157 | | | | | | | | -.1196 | |
| .163 | | .1202 | | | | | | | |
| .177 | | | .1310 | | | | | | |
| .229 | -.0421 | | | | | | | | |
| .246 | | .0981 | | | | | | | |
| .250 | | | | .1376 | .0991 | .0696 | .0391 | | |
| .274 | | | .2211 | | | | | | |
| .345 | | | | | | | | .0407 | |
| .362 | .0000 | | | | | | | | |
| .379 | | .2240 | | | | | | | |
| .400 | | | | .0000 | .1345 | | .0854 | | |
| .402 | | | .2268 | | | | | | |
| .419 | | | | | | | | | -.0671 |
| .497 | .1865 | | | | | | | | |
| .503 | | | | | | | | .1643 | |
| .550 | | | | .1477 | .1412 | | | | |

ARC97-019 1AB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 3) = -2.052 BETAO ( 4) = 6.607

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .1677 | | | | | | |
| .600 | | | | | | | .2002 | | |
| .637 | | .1646 | | | | | | | |
| .650 | | | | | | .1904 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1067 | | | | |
| .725 | | | | .2653 | | | | | |
| .730 | | | | | | | | | -.1438 |
| .750 | | | | | | -.0936 | -.0587 | | |
| .760 | | | -.1668 | | | | | | |
| .775 | | | | .0533 | .1307 | | | | |
| .798 | | -.1031 | | | | | | | |
| .808 | | | -.0372 | | | | | | |
| .834 | -.1417 | | | | | | | | |
| .839 | | -.0859 | | | | | | | |
| .850 | | | | -.1014 | -.0903 | -.2035 | | | |
| .857 | | | -.1382 | | | | | | |
| .862 | | | | | | | | -.2053 | |
| .855 | -.1097 | | | | | | | | |
| .879 | | -.1878 | | | | | | | |
| .900 | -.1485 | | | -.1992 | | | -.2345 | | |
| .905 | | | -.2453 | | | | | | |
| .919 | | -.2267 | | | | | | | |
| .950 | | | | -.2881 | -.2515 | -.2695 | | | |
| .953 | | | -.2744 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1830 | | | | | | | | |
| 1.000 | | | -.1513 | | -.2756 | | -.2538 | | |

ALPHAO( 4) = .004 BETAO ( 1) = -5.872

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0678 | .0651 | .3748 | .7693 | .7446 | .7283 | .7339 | -.0268 | |
| .010 | .0298 | .0600 | .2723 | .0885 | -.0449 | -.0008 | .1020 | | |
| .020 | .0386 | -.0006 | .0000 | -.0562 | -.0765 | -.1017 | -.1330 | -.0923 | |
| .040 | | .0017 | .0802 | | | | | | |
| .050 | .0645 | | | -.0388 | -.0852 | -.1249 | -.1469 | | |
| .069 | | | | | | | | -.1222 | |
| .090 | | | | -.0685 | | | | | |
| .081 | | | .0521 | | | | | | |
| .096 | | .1083 | | | | | | | |

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 4) = .004 BETAO ( 1) = -5.872

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | .1483 | | | | | | | | |
| .150 | | | | -.0628 | -.0871 | -.0893 | -.1022 | | |
| .157 | | | | | | | | -.0787 | |
| .163 | | .1485 | | | | | | | |
| .177 | | | .0268 | | | | | | |
| .229 | -.0329 | | | | | | | | |
| .246 | | -.0557 | | | | | | | |
| .250 | | | | -.0056 | -.0305 | -.0204 | -.0531 | | |
| .274 | | | -.0344 | | | | | | |
| .345 | | | | | | | | -.0540 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0831 | | | | | | | |
| .400 | | | | .0000 | .2617 | | .0303 | | |
| .402 | | | .2964 | | | | | | |
| .418 | | | | | | | | | -.0671 |
| .497 | .0787 | | | | | | | | |
| .503 | | | | | | | | .1544 | |
| .550 | | | | .4812 | .4804 | | | | |
| .565 | | | .4923 | | | | | | |
| .600 | | | | | | | .3033 | | |
| .637 | | .5070 | | | | | | | |
| .650 | | | | | | .3607 | | | |
| 670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2668 | | | | |
| .725 | | | | -.1271 | | | | | |
| .730 | | | | | | | | | -.0503 |
| .750 | | | | | | .0207 | .0530 | | |
| .760 | | | .1254 | | | | | | |
| .775 | | | | .3723 | .3318 | | | | |
| .798 | | .1137 | | | | | | | |
| .808 | | | .1770 | | | | | | |
| .834 | -.1102 | | | | | | | | |
| .839 | | .0105 | | | | | | | |
| .850 | | | | .1205 | .0698 | -.0808 | | | |
| .857 | | | .0015 | | | | | | |
| .862 | | | | | | | | -.0671 | |
| .865 | -.0158 | | | | | | | | |
| .879 | | -.0822 | | | | | | | |
| .900 | -.0711 | | | -.0442 | | | -.1150 | | |
| .905 | | | -.1519 | | | | | | |
| .919 | | -.1481 | | | | | | | |
| .950 | | | | -.1809 | -.1484 | -.1899 | | | |
| .953 | | | -.2332 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2204 | | | | | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 4) = .004 BETAO ( 1) = -5.872

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.2882 | | -.2912 | | -.2584 | | |

ALPHAO( 4) = .007 BETAO ( 2) = -3.838

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0146 | .0123 | .3344 | .7198 | .7048 | .6798 | .6916 | -.0545 | |
| .010 | .1038 | .0283 | .2617 | .0415 | -.0751 | -.0235 | .0679 | | |
| .020 | .1180 | .0071 | .0000 | -.0881 | -.1074 | -.1262 | -.1501 | -.1161 | |
| .040 | | .0340 | .1459 | | | | | | |
| .050 | .0183 | | | -.0707 | -.1157 | -.1439 | -.1679 | | |
| .069 | | | | | | | | -.1420 | |
| .080 | | | | -.0992 | | | | | |
| .081 | | | -.0094 | | | | | | |
| .086 | | .0545 | | | | | | | |
| .094 | .0699 | | | | | | | | |
| .150 | | | | -.1255 | -.1099 | -.1093 | -.1261 | | |
| .157 | | | | | | | | -.1031 | |
| .163 | | .1452 | | | | | | | |
| .177 | | | -.0312 | | | | | | |
| .229 | .0015 | | | | | | | | |
| .246 | | -.0874 | | | | | | | |
| .250 | | | | -.0271 | -.0610 | -.0624 | -.0753 | | |
| .274 | | | -.0552 | | | | | | |
| .345 | | | | | | | | -.0824 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0546 | | | | | | | |
| .400 | | | | .0000 | .0874 | | -.0098 | | |
| .402 | | | .2481 | | | | | | |
| .418 | | | | | | | | | -.0971 |
| .497 | .0215 | | | | | | | | |
| .503 | | | | | | | | .0824 | |
| .550 | | | | .4452 | .4721 | | | | |
| .565 | | | .4325 | | | | | | |
| .600 | | | | | | | .2380 | | |
| .637 | | .4345 | | | | | | | |
| .650 | | | | | | .3812 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2573 | | | | |
| .725 | | | | .2152 | | | | | |
| .730 | | | | | | | | | -.0899 |
| .750 | | | | | | .0123 | .0478 | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 4) = .007 BETAO ( 2) = -3.836

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .1140 | | | | | | |
| .775 | | | | .3465 | .3126 | | | | |
| .798 | | .0930 | | | | | | | |
| .808 | | | .1488 | | | | | | |
| .834 | -.1619 | | | | | | | | |
| .839 | | -.0177 | | | | | | | |
| .850 | | | | .0975 | .0519 | -.0931 | | | |
| .857 | | | -.0174 | | | | | | |
| .862 | | | | | | | | -.0790 | |
| .865 | -.0492 | | | | | | | | |
| .879 | | -.1271 | | | | | | | |
| .900 | -.0928 | | | -.0537 | | | -.1210 | | |
| .905 | | | -.1662 | | | | | | |
| .919 | | -.1597 | | | | | | | |
| .950 | | | | -.1866 | -.1579 | -.1844 | | | |
| .953 | | | -.2577 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2583 | | | | | | | | |
| 1.000 | | | -.2801 | | -.2741 | | -.2674 | | |

ALPHAO( 4) = .019 BETAO ( 3) = .354

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0744 | -.1014 | .2515 | .6153 | .6151 | .5953 | .6022 | -.1219 | |
| .010 | -.0261 | -.0930 | .1903 | -.0200 | -.1229 | -.0739 | .0100 | | |
| .020 | .0166 | -.0628 | .0000 | -.1222 | -.1546 | -.1794 | -.1902 | -.1624 | |
| .040 | | -.0044 | .1068 | | | | | | |
| .050 | -.0878 | | | -.1010 | -.1608 | -.1759 | -.2112 | | |
| .069 | | | | | | | | -.1404 | |
| .080 | | | | -.1198 | | | | | |
| .081 | | | -.0471 | | | | | | |
| .086 | | -.0165 | | | | | | | |
| .094 | .0198 | | | | | | | | |
| .150 | | | | -.0241 | -.1079 | -.1278 | -.1588 | | |
| .157 | | | | | | | | -.1216 | |
| .163 | | .0919 | | | | | | | |
| .177 | | | .0092 | | | | | | |
| .229 | -.0771 | | | | | | | | |
| .246 | | .0651 | | | | | | | |
| .250 | | | | -.0323 | -.0561 | -.0941 | -.1200 | | |
| .274 | | | .0830 | | | | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 4) = .019 BETAO ( 3) = .354

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .0397 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1512 | | | | | | | |
| .400 | | | | .0000 | .2540 | | .0484 | | |
| .402 | | | .2636 | | | | | | |
| .418 | | | | | | | | | -.0502 |
| .497 | .0640 | | | | | | | | |
| .503 | | | | | | | | .1216 | |
| .550 | | | | .3020 | .4239 | | | | |
| .565 | | | .2889 | | | | | | |
| .600 | | | | | | | .3097 | | |
| .637 | | .2787 | | | | | | | |
| .650 | | | | | | .3008 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2126 | | | | |
| .725 | | | | -.0079 | | | | | |
| .730 | | | | | | | | | -.2100 |
| .750 | | | | | | -.0259 | .0299 | | |
| .760 | | | .0434 | | | | | | |
| .775 | | | | .2518 | .2603 | | | | |
| .798 | | -.0020 | | | | | | | |
| .808 | | | .0389 | | | | | | |
| .834 | -.2073 | | | | | | | | |
| .839 | | -.0841 | | | | | | | |
| .850 | | | | .0098 | -.0027 | -.1317 | | | |
| .857 | | | -.1062 | | | | | | |
| .862 | | | | | | | | -.1214 | |
| .865 | -.0904 | | | | | | | | |
| .879 | | -.1627 | | | | | | | |
| .900 | -.1460 | | | -.1341 | | | -.1683 | | |
| .905 | | | -.2324 | | | | | | |
| .919 | | -.2333 | | | | | | | |
| .950 | | | | -.2492 | -.2273 | -.2264 | | | |
| .953 | | | -.2986 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2815 | | | | | | | | |
| 1.000 | | | -.3104 | | -.2483 | | -.2897 | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHA0( 4) = .011 BETA0 ( 4) = 4.521

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1262 | -.1350 | .2367 | .6546 | .6371 | .6033 | .5926 | -.0039 | |
| .010 | -.0958 | -.1062 | .2299 | .1928 | .0747 | .0470 | .0802 | | |
| .020 | -.0819 | -.0812 | .0000 | .1117 | .1181 | .0185 | -.0983 | 0104 | |
| .040 | | -.0726 | .1673 | | | | | | |
| .050 | -.0884 | | | .1666 | .0894 | .0657 | -.0350 | | |
| .069 | | | | | | | | .0017 | |
| .080 | | | | .2149 | | | | | |
| .081 | | | .1392 | | | | | | |
| .086 | | -.0172 | | | | | | | |
| .094 | -.0797 | | | | | | | | |
| .150 | | | | .2789 | .1753 | .1160 | .0588 | | |
| .157 | | | | | | | | .0013 | |
| .163 | | .1265 | | | | | | | |
| .177 | | | .1442 | | | | | | |
| .229 | -.0260 | | | | | | | | |
| .246 | | .1310 | | | | | | | |
| .250 | | | | .1824 | .1292 | .1025 | .0697 | | |
| .274 | | | .2884 | | | | | | |
| .345 | | | | | | | | .1080 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .2753 | | | | | | | |
| .400 | | | | .0000 | .2158 | | .1274 | | |
| .402 | | | .2381 | | | | | | |
| .418 | | | | | | | | | -.0768 |
| .497 | .1853 | | | | | | | | |
| .503 | | | | | | | | .1892 | |
| .550 | | | | .2269 | .3064 | | | | |
| .565 | | | .2040 | | | | | | |
| .600 | | | | | | | .2255 | | |
| .637 | | .1946 | | | | | | | |
| .650 | | | | | | .2194 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1221 | | | | |
| .725 | | | | -.1012 | | | | | |
| .730 | | | | | | | | | -.2613 |
| .750 | | | | | | -.0770 | -.0434 | | |
| .760 | | | -.1114 | | | | | | |
| .775 | | | | .1139 | .1683 | | | | |
| .798 | | -.1174 | | | | | | | |
| .809 | | | -.0309 | | | | | | |
| .834 | -.1204 | | | | | | | | |
| .839 | | -.0611 | | | | | | | |
| .850 | | | | -.0818 | -.0633 | -.1824 | | | |
| .857 | | | -.1242 | | | | | | |
| .862 | | | | | | | | -.1949 | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 4) = .011 BETAO ( 4) = 4.521

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.0923 | | | | | | | | |
| .879 | | -.1733 | | | | | | | |
| .900 | -.1552 | | | -.1987 | | | -.2162 | | |
| .905 | | | -.2378 | | | | | | |
| .919 | | -.2490 | | | | | | | |
| .950 | | | | -.2094 | -.2491 | -.2830 | | | |
| .953 | | | -.3072 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1983 | | | | | | | | |
| 1.000 | | | -.2432 | | -.2748 | | -.2944 | | |

ALPHAO( 4) = .022 BETAO ( 5) = 6.587

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1742 | -.0171 | .3083 | .5913 | .5593 | .5025 | .3436 | -.0148 | |
| .010 | -.1502 | -.0040 | .3214 | .0664 | -.0193 | -.0524 | .0214 | | |
| .020 | -.1319 | .0350 | .0000 | .0869 | .0350 | -.0867 | -.1579 | -.0032 | |
| .040 | | .0385 | .2061 | | | | | | |
| .050 | -.1068 | | | .0873 | .0088 | -.0344 | -.0797 | | |
| .069 | | | | | | | | -.0025 | |
| .080 | | | | .2138 | | | | | |
| .081 | | | .1404 | | | | | | |
| .086 | | .0590 | | | | | | | |
| .094 | -.1257 | | | | | | | | |
| .150 | | | | .1425 | .1333 | .0966 | .0853 | | |
| .157 | | | | | | | | .0438 | |
| .163 | | .1913 | | | | | | | |
| .177 | | | .2175 | | | | | | |
| .229 | .0870 | | | | | | | | |
| .246 | | .1420 | | | | | | | |
| .250 | | | | .2125 | .1374 | .1118 | .0995 | | |
| .274 | | | .2295 | | | | | | |
| .345 | | | | | | | | .1728 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .2501 | | | | | | | |
| .400 | | | | .0000 | .1941 | | .1838 | | |
| .422 | | | .2532 | | | | | | |
| .478 | | | | | | | | | -.0845 |
| .497 | .2272 | | | | | | | | |
| .503 | | | | | | | | .1260 | |
| .550 | | | | .1883 | .2723 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHA0( 4) = .022 BETA0 ( 5) = 6.587

SECTION ( 11)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| X/CW \ Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| .565 | | | .1969 | | | | | | |
| .600 | | | | | | | .1747 | | |
| .637 | | .1869 | | | | | | | |
| .650 | | | | | | .1812 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1037 | | | | |
| .725 | | | | .2453 | | | | | |
| .750 | | | | | | | | | -.3074 |
| .750 | | | | | | -.1069 | -.0825 | | |
| .760 | | | -.1382 | | | | | | |
| .775 | | | | .0541 | .1369 | | | | |
| .798 | | .0966 | | | | | | | |
| .808 | | | -.0225 | | | | | | |
| .834 | -.1203 | | | | | | | | |
| .839 | | -.0585 | | | | | | | |
| .850 | | | | -.0991 | -.0917 | -.2115 | | | |
| .857 | | | -.1277 | | | | | | |
| .862 | | | | | | | | -.2475 | |
| .866 | -.0844 | | | | | | | | |
| .879 | | -.1745 | | | | | | | |
| .900 | -.1479 | | | -.1994 | | | -.2490 | | |
| .905 | | | -.2453 | | | | | | |
| .919 | | -.2339 | | | | | | | |
| .950 | | | | -.2857 | -.2605 | -.3062 | | | |
| .953 | | | -.2923 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1853 | | | | | | | | |
| 1.000 | | | -.1792 | | -.2767 | | -.3077 | | |

ALPHA0( 5) = 2.066 BETA0 ( 1) = -5.888

SECTION ( 11)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| X/CW \ Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| 000 | .0209 | .0631 | .4002 | .7939 | .7799 | .7677 | .7589 | .0720 | |
| 010 | .0131 | 0574 | 3203 | .1459 | .0752 | .1266 | .2018 | | |
| 020 | - 0173 | 0212 | 0001 | .0582 | .0411 | .0419 | -.0267 | .0563 | |
| 040 | | 0096 | .2328 | | | | | | |
| 060 | .0814 | | | .0252 | -.0037 | - 0154 | -.0219 | | |
| 080 | | | | | | | | .0485 | |
| 100 | | | | -.0128 | | | | | |
| 120 | | | 0752 | | | | | | |
| .066 | | .12. | | | | | | | |

ARC97-019 !A81 LVAP(ALLML SEALED) LEFT WING BOT. (RETL35)

ALPHA0( 5) = 2.066 BETA0 ( 1) = -5.888

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/C | | | | | | | | | |
| .094 | .0801 | | | | | | | | |
| .150 | | | | .0462 | -.0062 | .0092 | .0236 | | |
| .157 | | | | | | | | .1016 | |
| .163 | | .2445 | | | | | | | |
| .177 | | | .1137 | | | | | | |
| .229 | -.0237 | | | | | | | | |
| .246 | | -.0110 | | | | | | | |
| .250 | | | | .0192 | .0586 | .0785 | .0768 | | |
| .274 | | | -.0072 | | | | | | |
| .345 | | | | | | | | .2927 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1156 | | | | | | | |
| .400 | | | | .0000 | .4269 | | .3469 | | |
| .402 | | | .4149 | | | | | | |
| .418 | | | | | | | | | .0547 |
| .497 | .1191 | | | | | | | | |
| .503 | | | | | | | | .2892 | |
| .550 | | | | .5392 | .5107 | | | | |
| 565 | | | .5500 | | | | | | |
| .600 | | | | | | | .3485 | | |
| .637 | | .5531 | | | | | | | |
| .650 | | | | | | .3531 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2750 | | | | |
| .725 | | | | -.1145 | | | | | |
| .730 | | | | | | | | | -.2815 |
| .750 | | | | | | .0137 | .0363 | | |
| .760 | | | .1388 | | | | | | |
| .775 | | | | .3845 | .3629 | | | | |
| .798 | | .1319 | | | | | | | |
| .808 | | | .1917 | | | | | | |
| .834 | -.0984 | | | | | | | | |
| .839 | | .0226 | | | | | | | |
| .850 | | | | .1343 | .0782 | -.0812 | | | |
| .85? | | | 0159 | | | | | | |
| .86? | | | | | | | | -.1091 | |
| .865 | -.0061 | | | | | | | | |
| .879 | | -.0861 | | | | | | | |
| .900 | -.0750 | | | -.0322 | | | -.1430 | | |
| .905 | | | -.1430 | | | | | | |
| .919 | | -.1394 | | | | | | | |
| .950 | | | | -.1718 | -.1448 | -.1755 | | | |
| .953 | | | -.2320 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2293 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 5) = 2.066 BETAO ( 1) = -5.888

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.2685 | | -.3357 | | -.2815 | | |

ALPHAO( 5) = 2.063 BETAO ( 2) = -1.746

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0554 | -.0533 | .3162 | .6984 | .7063 | .6843 | .6798 | .0160 | |
| .010 | .0135 | .0278 | .3073 | .0859 | .0136 | .0871 | .1481 | | |
| .020 | .0550 | .0579 | .0000 | .0001 | .0731 | .0040 | -.0589 | .0000 | |
| .040 | | .0648 | .1140 | | | | | | |
| .050 | -.0219 | | | -.0109 | -.0319 | -.0440 | -.0564 | | |
| .069 | | | | | | | | -.0026 | |
| .080 | | | | -.0084 | | | | | |
| .081 | | | -.0018 | | | | | | |
| .086 | | .0227 | | | | | | | |
| .094 | .0024 | | | | | | | | |
| .150 | | | | .0073 | -.0034 | -.0196 | -.0225 | | |
| .157 | | | | | | | | .0311 | |
| .167 | | .1128 | | | | | | | |
| .177 | | | .0269 | | | | | | |
| .229 | .0694 | | | | | | | | |
| .246 | | .0539 | | | | | | | |
| .250 | | | | .0098 | .0206 | .0485 | .0359 | | |
| .274 | | | .0699 | | | | | | |
| .345 | | | | | | | | .2456 | |
| .352 | .0000 | | | | | | | | |
| .390 | | .1006 | | | | | | | |
| .400 | | | | .0000 | .3417 | | .2735 | | |
| .402 | | | .3204 | | | | | | |
| .418 | | | | | | | | | .0017 |
| .497 | .0649 | | | | | | | | |
| .503 | | | | | | | | .2652 | |
| .550 | | | | .4882 | .4870 | | | | |
| .565 | | | .4054 | | | | | | |
| .600 | | | | | | | .3272 | | |
| .637 | | .3872 | | | | | | | |
| .650 | | | | | | .3321 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2406 | | | | |
| .725 | | | | -.0957 | | | | | |
| .730 | | | | | | | | | -.3367 |
| .750 | | | | | | .0009 | .0263 | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 5) = 2.063 BETAO ( 2) = -1.746

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .0956 | | | | | | |
| .775 | | | | .3204 | .3098 | | | | |
| .798 | | .0817 | | | | | | | |
| .808 | | | .1162 | | | | | | |
| .834 | -.1301 | | | | | | | | |
| .839 | | -.0239 | | | | | | | |
| .850 | | | | .0715 | .0376 | -.1037 | | | |
| .857 | | | -.0464 | | | | | | |
| .862 | | | | | | | | -.1414 | |
| .865 | -.0248 | | | | | | | | |
| .879 | | -.1143 | | | | | | | |
| .900 | -.1164 | | | -.0822 | | | -.1578 | | |
| .905 | | | -.1793 | | | | | | |
| .919 | | -.1863 | | | | | | | |
| .950 | | | | -.1954 | -.1864 | -.2144 | | | |
| .953 | | | -.2491 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2522 | | | | | | | | |
| 1.000 | | | -.2893 | | -.2748 | | -.2988 | | |

ALPHAO( 5) = 2.078 BETAO ( 3) = 2.458

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1072 | -.1713 | .2812 | .6041 | .6200 | .6022 | .7077 | .1520 | |
| .010 | -.0745 | -.1234 | .3038 | .0606 | .0684 | .0768 | .2312 | | |
| .020 | -.0144 | -.0540 | .0000 | .0345 | .0883 | .0436 | .0543 | .1776 | |
| .040 | | -.0420 | .1022 | | | | | | |
| .050 | -.0831 | | | .0956 | .0181 | .0668 | .1052 | | |
| .069 | | | | | | | | .1536 | |
| .080 | | | | .0922 | | | | | |
| .081 | | | .0384 | | | | | | |
| .088 | | -.0293 | | | | | | | |
| .094 | -.0041 | | | | | | | | |
| .150 | | | | .1519 | .1835 | .1569 | .2139 | | |
| .157 | | | | | | | | .1645 | |
| .163 | | .0698 | | | | | | | |
| .177 | | | .1933 | | | | | | |
| .229 | -.0098 | | | | | | | | |
| .246 | | .1041 | | | | | | | |
| 250 | | | | .2560 | .2137 | .2513 | .2202 | | |
| .274 | | | .2348 | | | | | | |

ARC97-019 TAB1 EVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHA0( 5) = 2.078 BETA0 ( 3) = 2.458

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .3118 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .2389 | | | | | | | |
| .400 | | | | .0000 | .2257 | | .4015 | | |
| .402 | | | .2660 | | | | | | |
| .418 | | | | | | | | | -.1066 |
| .497 | .1805 | | | | | | | | |
| .503 | | | | | | | | .2285 | |
| .550 | | | | .2666 | .4989 | | | | |
| .565 | | | .2469 | | | | | | |
| .600 | | | | | | | .2900 | | |
| .637 | | .2326 | | | | | | | |
| .650 | | | | | | .3020 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2103 | | | | |
| .725 | | | | .0703 | | | | | |
| .730 | | | | | | | | | -.4232 |
| .750 | | | | | | -.0322 | -.0090 | | |
| .760 | | | -.0089 | | | | | | |
| .775 | | | | .2273 | .2448 | | | | |
| .798 | | -.0769 | | | | | | | |
| .809 | | | .0161 | | | | | | |
| .834 | -.1608 | | | | | | | | |
| .839 | | -.0839 | | | | | | | |
| .850 | | | | -.0037 | -.0151 | -.1396 | | | |
| .857 | | | -.1235 | | | | | | |
| .862 | | | | | | | | -.1834 | |
| .865 | -.0898 | | | | | | | | |
| .879 | | -.1298 | | | | | | | |
| .900 | -.1541 | | | -.1455 | | | -.1948 | | |
| .905 | | | -.2147 | | | | | | |
| .919 | | -.2241 | | | | | | | |
| .950 | | | | -.2594 | -.2282 | -.2549 | | | |
| .953 | | | -.2695 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .955 | -.1992 | | | | | | | | |
| 1.000 | | | -.2838 | | -.2328 | | -.3174 | | |

ARC97-019 .A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 5) = 2.104 BETAO ( 4) = 6.587

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1713 | -.2081 | .3053 | .6137 | 5869 | .5460 | .5642 | .0351 | |
| .010 | -.1464 | -.1916 | .3704 | .2893 | .1924 | .1546 | .1981 | | |
| .020 | -.1266 | -.0935 | .0000 | .2352 | .1770 | .1314 | .0821 | .0702 | |
| .040 | | -.0669 | .3040 | | | | | | |
| .050 | -.0977 | | | .1711 | .1193 | .1311 | .1192 | | |
| .069 | | | | | | | | .0692 | |
| .080 | | | | .2246 | | | | | |
| .081 | | | .2539 | | | | | | |
| .086 | | .0575 | | | | | | | |
| .094 | -.0913 | | | | | | | | |
| .150 | | | | .2255 | .1871 | .1773 | .1697 | | |
| .157 | | | | | | | | .0795 | |
| .163 | | .2430 | | | | | | | |
| .177 | | | .2175 | | | | | | |
| .229 | .0434 | | | | | | | | |
| .246 | | .2146 | | | | | | | |
| .250 | | | | .2302 | .2136 | .2172 | .1716 | | |
| .274 | | | .2645 | | | | | | |
| .345 | | | | | | | | .1501 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .2756 | | | | | | | |
| .400 | | | | .0000 | .2518 | | .2986 | | |
| .402 | | | .2767 | | | | | | |
| .418 | | | | | | | | | -.3101 |
| .497 | .2477 | | | | | | | | |
| .503 | | | | | | | | .0982 | |
| .550 | | | | .2224 | .3038 | | | | |
| .585 | | | .2103 | | | | | | |
| .600 | | | | | | | .1884 | | |
| .637 | | .2030 | | | | | | | |
| .650 | | | | | | .1677 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0705 | | | | |
| .725 | | | | -.7815 | | | | | |
| .730 | | | | | | | | | -.4435 |
| .750 | | | | | | -.1167 | -.0918 | | |
| .760 | | | -.1277 | | | | | | |
| .775 | | | | .0562 | .1135 | | | | |
| .798 | | -.0559 | | | | | | | |
| .808 | | | -.0023 | | | | | | |
| .834 | -.1041 | | | | | | | | |
| .839 | | -.0483 | | | | | | | |
| .850 | | | | -.0973 | -.1038 | -.2158 | | | |
| .857 | | | -.1154 | | | | | | |
| .882 | | | | | | | | -.2700 | |

ARC97-019 TABLE EVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHA0( 5) = 2.104 BETA0 ( 4) = 6.587

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.0718 | | | | | | | | |
| .879 | | .1681 | | | | | | | |
| .900 | -.1362 | | | -.1971 | | | -.2532 | | |
| .905 | | | -.2339 | | | | | | |
| .919 | | -.2296 | | | | | | | |
| .950 | | | | -.2801 | -.2686 | -.3116 | | | |
| .953 | | | -.2836 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1745 | | | | | | | | |
| 1.000 | | | -.1816 | | -.2580 | | -.3477 | | |

ALPHA0( 6) = 4.193 BETA0 ( 1) = -5.872

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0270 | .0455 | .4113 | .7894 | .7941 | .7898 | .7816 | .2398 | |
| .010 | .0056 | .0606 | .4429 | .2095 | .2396 | .2688 | .3155 | | |
| .020 | -.0266 | .0227 | .0000 | .1589 | .2356 | .1818 | .1383 | .2845 | |
| .040 | | .0150 | .2465 | | | | | | |
| .050 | .0959 | | | .0756 | .0763 | .0998 | .1296 | | |
| .059 | | | | | | | | .2952 | |
| .080 | | | | .0498 | | | | | |
| .081 | | | .0915 | | | | | | |
| .085 | | .1198 | | | | | | | |
| .094 | .0660 | | | | | | | | |
| .150 | | | | .1303 | .1188 | .1713 | .2197 | | |
| .157 | | | | | | | | .3512 | |
| .167 | | .2639 | | | | | | | |
| .177 | | | .1448 | | | | | | |
| .223 | -.0256 | | | | | | | | |
| .245 | | .0769 | | | | | | | |
| .250 | | | | .1118 | .2449 | .3508 | .4506 | | |
| .274 | | | .1511 | | | | | | |
| .345 | | | | | | | | .2849 | |
| .353 | .0000 | | | | | | | | |
| .397 | | .1767 | | | | | | | |
| .400 | | | | .3000 | .5487 | | .4706 | | |
| .403 | | | .5063 | | | | | | |
| .418 | | | | | | | | | -.1537 |
| .497 | .1510 | | | | | | | | |
| .503 | | | | | | | | .2417 | |
| .550 | | | | .5123 | .4686 | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHA0( 6) = 4.193 BETA0 ( 1) = -5.872

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .5320 | | | | | | |
| .600 | | | | | | | .3000 | | |
| .637 | | .5427 | | | | | | | |
| .650 | | | | | | .3290 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2615 | | | | |
| .725 | | | | -.1014 | | | | | |
| .730 | | | | | | | | | -.4308 |
| .750 | | | | | | .0051 | .0172 | | |
| .750 | | | .1263 | | | | | | |
| .775 | | | | .3769 | .3633 | | | | |
| .798 | | .1203 | | | | | | | |
| .808 | | | .1735 | | | | | | |
| .834 | -.1105 | | | | | | | | |
| .839 | | .0079 | | | | | | | |
| .850 | | | | .1182 | .0714 | -.0927 | | | |
| .857 | | | -.0059 | | | | | | |
| .852 | | | | | | | | -.1399 | |
| .865 | -.0298 | | | | | | | | |
| .879 | | -.1194 | | | | | | | |
| .900 | -.1109 | | | -.0456 | | | -.1601 | | |
| .905 | | | -.1568 | | | | | | |
| .919 | | -.1811 | | | | | | | |
| .950 | | | | -.1754 | -.1530 | -.2060 | | | |
| .953 | | | -.2468 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2126 | | | | | | | | |
| 1.000 | | | -.2777 | | -.3285 | | -.3227 | | |

ALPHA0( 6) = 4.191 BETA0 ( 2) = -3.831

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0187 | -.0167 | .3691 | .7458 | .7537 | .7384 | .7394 | .1689 | |
| .010 | .0280 | .0092 | .4060 | .2315 | .2349 | .2477 | .2903 | | |
| .020 | .0783 | -.0035 | .0000 | .1768 | .2199 | .1628 | .1166 | .2100 | |
| .040 | | .0379 | .2287 | | | | | | |
| .050 | .0187 | | | .0583 | .0591 | .0803 | .0989 | | |
| .069 | | | | | | | | .2109 | |
| .080 | | | | .0362 | | | | | |
| .081 | | | .0753 | | | | | | |
| .086 | | .1012 | | | | | | | |

AF 77-019 !AB! LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHA0( 6) = 4.191 BETA0 ( 2) = -3.831

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | .0776 | | | | | | | | |
| .150 | | | | .1116 | .1024 | .1294 | .1718 | | |
| .157 | | | | | | | | .2917 | |
| .163 | | .2256 | | | | | | | |
| .177 | | | .1186 | | | | | | |
| .229 | .0154 | | | | | | | | |
| .246 | | .1442 | | | | | | | |
| .250 | | | | .0498 | .1615 | .1898 | .2174 | | |
| .274 | | | .0954 | | | | | | |
| .345 | | | | | | | | .2797 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1284 | | | | | | | |
| .400 | | | | .0000 | .5290 | | .4725 | | |
| .402 | | | .4388 | | | | | | |
| .418 | | | | | | | | | -.1749 |
| .497 | .1153 | | | | | | | | |
| .503 | | | | | | | | .2351 | |
| .550 | | | | .4897 | .4687 | | | | |
| .555 | | | .4899 | | | | | | |
| .600 | | | | | | | .3020 | | |
| .637 | | .4872 | | | | | | | |
| .650 | | | | | | .3254 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2509 | | | | |
| .725 | | | | -.4305 | | | | | |
| .730 | | | | | | | | | -.4496 |
| .750 | | | | | | -.0021 | .0096 | | |
| .760 | | | .1119 | | | | | | |
| .775 | | | | .3537 | .3472 | | | | |
| .799 | | .1024 | | | | | | | |
| .809 | | | .1507 | | | | | | |
| .834 | -.1173 | | | | | | | | |
| .839 | | -.0095 | | | | | | | |
| .850 | | | | .1037 | .0589 | -.1012 | | | |
| .857 | | | -.0214 | | | | | | |
| .862 | | | | | | | | -.1568 | |
| .865 | -.0335 | | | | | | | | |
| .879 | | -.1330 | | | | | | | |
| .900 | -.1186 | | | -.0577 | | | -.1690 | | |
| .905 | | | -.1707 | | | | | | |
| .919 | | -.2098 | | | | | | | |
| .950 | | | | -.1875 | -.1648 | -.2144 | | | |
| .953 | | | -.2585 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2198 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 6) = 4.191 BETAO ( 2) = -3.831

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.2863 | | -.3409 | | -.3334 | | |

ALPHAO( 6) = 4.197 BETAO ( 3) = .361

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3340 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0876 | -.1271 | .2739 | .6695 | .6900 | .6770 | .6728 | .0811 | |
| .010 | -.0167 | -.0599 | .3346 | .2501 | .2297 | .2508 | .3839 | | |
| .020 | .0127 | .0043 | .0000 | .1896 | .2138 | .2163 | .2739 | .1400 | |
| .040 | | .0114 | .1493 | | | | | | |
| .050 | -.0538 | | | .1054 | .1086 | .2141 | .2636 | | |
| .069 | | | | | | | | .1426 | |
| .080 | | | | .1246 | | | | | |
| .081 | | | .0527 | | | | | | |
| .086 | | -.0062 | | | | | | | |
| .094 | .0618 | | | | | | | | |
| .150 | | | | .2489 | .3556 | .3022 | .2598 | | |
| .157 | | | | | | | | .1519 | |
| .163 | | .1104 | | | | | | | |
| .177 | | | .0996 | | | | | | |
| .229 | .0679 | | | | | | | | |
| .246 | | .1212 | | | | | | | |
| .250 | | | | .3195 | .2771 | .2840 | .2163 | | |
| .274 | | | .3365 | | | | | | |
| .345 | | | | | | | | .2573 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .3191 | | | | | | | |
| .400 | | | | .0000 | .3106 | | .2741 | | |
| .402 | | | .3336 | | | | | | |
| .418 | | | | | | | | | -.2881 |
| .497 | .2592 | | | | | | | | |
| .503 | | | | | | | | .2143 | |
| .550 | | | | .3472 | .3843 | | | | |
| .565 | | | .3242 | | | | | | |
| .500 | | | | | | | .2774 | | |
| .637 | | .3194 | | | | | | | |
| .650 | | | | | | .2916 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2081 | | | | |
| .725 | | | | .4627 | | | | | |
| .730 | | | | | | | | | -.5055 |
| .750 | | | | | | -.0309 | -.0184 | | |

ARC87-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (REF 35)

ALPHA0( 8) = 4.197 BETA0 ( 3) = .381

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .0118 | | | | | | |
| .775 | | | | .2422 | .2698 | | | | |
| .798 | | -.0175 | | | | | | | |
| .808 | | | .0307 | | | | | | |
| .834 | -.1943 | | | | | | | | |
| .839 | | -.0945 | | | | | | | |
| .850 | | | | .0211 | .0018 | -.1368 | | | |
| .857 | | | -.1153 | | | | | | |
| .862 | | | | | | | | -.2052 | |
| .865 | -.0828 | | | | | | | | |
| .879 | | -.1657 | | | | | | | |
| .900 | -.1271 | | | -.1248 | | | -.1935 | | |
| .905 | | | -.2356 | | | | | | |
| .919 | | -.2203 | | | | | | | |
| .950 | | | | -.2447 | -.2208 | -.2526 | | | |
| .953 | | | -.2982 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2387 | | | | | | | | |
| 1.000 | | | -.3033 | | -.2854 | | -.3571 | | |

ALPHA0( 6) = 4.208 BETA0 ( 4) = 4.530

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1620 | -.2700 | .2469 | .7154 | .6723 | .6583 | .6177 | .0355 | |
| .010 | -.0960 | -.2288 | .3607 | .5405 | .4212 | .4095 | .4191 | | |
| .020 | -.0550 | -.1160 | .0000 | .4447 | .3727 | .3577 | .2960 | .1077 | |
| .040 | | -.0985 | .3373 | | | | | | |
| .050 | -.0828 | | | .3384 | .2635 | .2851 | .2838 | | |
| .069 | | | | | | | | .1287 | |
| .080 | | | | 3119 | | | | | |
| .081 | | | .2857 | | | | | | |
| .085 | | .0003 | | | | | | | |
| .094 | .0090 | | | | | | | | |
| .150 | | | | .2605 | .2854 | .2738 | .2719 | | |
| .157 | | | | | | | | .1503 | |
| .163 | | .2525 | | | | | | | |
| .177 | | | .2979 | | | | | | |
| .229 | -.0142 | | | | | | | | |
| .246 | | .2138 | | | | | | | |
| .250 | | | | .2789 | .2748 | .2693 | .2352 | | |
| .274 | | | .2998 | | | | | | |

ARC87-019 IAB1 LVAP(ALL HL SEALED) LEFT WING BOT. (RETL35)

ALPHA0( 6) = 4.208 BETA0 ( 4) = 4.530

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .2094 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .3076 | | | | | | | |
| .400 | | | | .0000 | .3015 | | .2898 | | |
| .402 | | | .3061 | | | | | | |
| .418 | | | | | | | | | -.3549 |
| .497 | .2623 | | | | | | | | |
| .503 | | | | | | | | .1916 | |
| .550 | | | | .2708 | .3040 | | | | |
| .565 | | | .2499 | | | | | | |
| .600 | | | | | | | .2349 | | |
| .637 | | .2239 | | | | | | | |
| .650 | | | | | | .2253 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1174 | | | | |
| .725 | | | | .0390 | | | | | |
| .730 | | | | | | | | | -.5209 |
| .750 | | | | | | -.0799 | -.0357 | | |
| .760 | | | -.1081 | | | | | | |
| .775 | | | | .1076 | .1698 | | | | |
| .798 | | -.1148 | | | | | | | |
| .808 | | | -.0360 | | | | | | |
| .834 | -.1019 | | | | | | | | |
| .839 | | -.0493 | | | | | | | |
| .850 | | | | -.0852 | -.0651 | -.1793 | | | |
| .857 | | | -.1145 | | | | | | |
| .862 | | | | | | | | -.2212 | |
| .865 | -.0815 | | | | | | | | |
| .879 | | -.1550 | | | | | | | |
| .900 | -.1303 | | | -.1871 | | | -.2075 | | |
| .905 | | | -.2144 | | | | | | |
| .919 | | -.2220 | | | | | | | |
| .950 | | | | -.2831 | -.2548 | -.2781 | | | |
| .953 | | | -.2830 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1665 | | | | | | | | |
| 1.000 | | | -.1838 | | -.2507 | | -.3632 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHA0( 6) = 4.216 BETA0 ( 5) = 5.589

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1928 | -.2876 | .2797 | .5810 | .5913 | .5915 | .5649 | -.0135 | |
| .010 | -.1566 | -.2537 | .3916 | .3875 | .3395 | .3492 | .3601 | | |
| .020 | -.1253 | -.1021 | .0000 | .3204 | .3010 | .2841 | .2629 | .0711 | |
| .040 | | -.0656 | .3331 | | | | | | |
| .050 | -.0411 | | | .2599 | .2215 | .2708 | .2542 | | |
| .069 | | | | | | | | .1064 | |
| .080 | | | | .2637 | | | | | |
| .081 | | | .2174 | | | | | | |
| .086 | | .0875 | | | | | | | |
| .094 | -.0527 | | | | | | | | |
| .150 | | | | .2624 | .2466 | .2748 | .2558 | | |
| .157 | | | | | | | | .1226 | |
| .163 | | .2770 | | | | | | | |
| .177 | | | .2629 | | | | | | |
| .229 | .0099 | | | | | | | | |
| .246 | | .2032 | | | | | | | |
| .250 | | | | .2608 | .2539 | .2719 | .2582 | | |
| .274 | | | .2819 | | | | | | |
| .345 | | | | | | | | .1071 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .2842 | | | | | | | |
| .400 | | | | .0000 | .3328 | | .2785 | | |
| .402 | | | .2876 | | | | | | |
| .418 | | | | | | | | | -.4339 |
| .497 | .2653 | | | | | | | | |
| .503 | | | | | | | | .0815 | |
| .550 | | | | .2454 | .2421 | | | | |
| .565 | | | .2183 | | | | | | |
| .600 | | | | | | | .1621 | | |
| .637 | | .2092 | | | | | | | |
| .650 | | | | | | .1612 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0579 | | | | |
| .725 | | | | -.3299 | | | | | |
| .730 | | | | | | | | | -.5200 |
| .750 | | | | | | -.1170 | -.0929 | | |
| .760 | | | -.1248 | | | | | | |
| .775 | | | | .0448 | .1070 | | | | |
| .798 | | -.0441 | | | | | | | |
| .800 | | | .0038 | | | | | | |
| .834 | -.0818 | | | | | | | | |
| .839 | | .0386 | | | | | | | |
| .850 | | | | -.0904 | -.1093 | -.2150 | | | |
| .857 | | | -.1123 | | | | | | |
| .862 | | | | | | | | -.2704 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 6) = 4.218 BETAO ( 5) = 6.589

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .885 | -.0611 | | | | | | | | |
| .879 | | -.1581 | | | | | | | |
| .900 | -.1092 | | | -.1859 | | | -.2540 | | |
| .905 | | | -.2262 | | | | | | |
| .919 | | -.2156 | | | | | | | |
| .950 | | | | -.2722 | -.2771 | -.3084 | | | |
| .953 | | | -.2630 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1638 | | | | | | | | |
| 1.000 | | | -.1789 | | -.2347 | | -.3801 | | |

ALPHAO( 7) = 6.319 BETAO ( 1) = -3.811

SE 4 ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0275 | -.0366 | .3968 | .7579 | .8002 | .7869 | .7558 | .1233 | |
| .010 | .0342 | .0110 | .4658 | .3466 | .4215 | .4955 | .5636 | | |
| .020 | .0900 | .1039 | .0000 | .2801 | .3792 | .4019 | .4467 | .2303 | |
| .040 | | .1272 | .2603 | | | | | | |
| .050 | .0224 | | | .2139 | .2568 | .3498 | .4280 | | |
| .069 | | | | | | | | .2549 | |
| .080 | | | | .3498 | | | | | |
| .081 | | | .1080 | | | | | | |
| .086 | | .0984 | | | | | | | |
| .094 | .0744 | | | | | | | | |
| .150 | | | | .1997 | .3239 | .3839 | .3920 | | |
| .157 | | | | | | | | .2652 | |
| .163 | | .2587 | | | | | | | |
| .177 | | | .1516 | | | | | | |
| .220 | .1212 | | | | | | | | |
| .246 | | .1834 | | | | | | | |
| .250 | | | | .3984 | .3850 | .3833 | .3435 | | |
| .274 | | | .3115 | | | | | | |
| .345 | | | | | | | | .2727 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .3478 | | | | | | | |
| .400 | | | | .0000 | .4310 | | .4065 | | |
| .402 | | | .3844 | | | | | | |
| .418 | | | | | | | | | -.3179 |
| .497 | .2871 | | | | | | | | |
| .503 | | | | | | | | .2329 | |
| .550 | | | | .4238 | .4143 | | | | |

AR197-919 TAB: 1 VARIABLE SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 7) = 6.319 BETAO ( 1) = -3.811

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .4351 | | | | | | |
| .600 | | | | | | | .2872 | | |
| .637 | | .4476 | | | | | | | |
| .650 | | | | | | .3060 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2284 | | | | |
| .725 | | | | -.5610 | | | | | |
| .730 | | | | | | | | | -.5083 |
| .750 | | | | | | -.0155 | -.0015 | | |
| .760 | | | .0716 | | | | | | |
| .775 | | | | .3176 | .3115 | | | | |
| .799 | | .0547 | | | | | | | |
| .809 | | | .1263 | | | | | | |
| .834 | -.1569 | | | | | | | | |
| .839 | | -.0511 | | | | | | | |
| .850 | | | | .0821 | .0428 | -.1170 | | | |
| .867 | | | -.0502 | | | | | | |
| .892 | | | | | | | | -.1692 | |
| .865 | -.0555 | | | | | | | | |
| .879 | | -.1570 | | | | | | | |
| .900 | -.1414 | | | -.0760 | | | -.1742 | | |
| .905 | | | -.1957 | | | | | | |
| .919 | | -.2338 | | | | | | | |
| .950 | | | | -.2041 | -.1747 | -.2266 | | | |
| .963 | | | -.2779 | | | | | | |
| .985 | | .0000 | | | | | | | |
| .965 | -.2303 | | | | | | | | |
| 1.000 | | | -.3015 | | -.3556 | | -.3751 | | |

ALPHAO( 7) = 6.315 BETAO ( 2) = -1.716

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0141 | -.0835 | .3201 | .7251 | .7566 | .7459 | .7047 | .0665 | |
| .010 | .0334 | -.0283 | .4003 | .3913 | .4334 | .5129 | .5560 | | |
| .020 | .0373 | .0119 | .0000 | .3090 | .3308 | .4323 | .4344 | .1746 | |
| .040 | | .0242 | .3451 | | | | | | |
| .060 | -.0072 | | | .1848 | .3062 | .3596 | .4051 | | |
| .069 | | | | | | | | .2017 | |
| .080 | | | | .2126 | | | | | |
| .081 | | | .1683 | | | | | | |
| .095 | | .0837 | | | | | | | |

ARC97-018 !A81 LVAP(ALLML SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 7) = 8.315 BETAO ( 2) = -1.718

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | .0095 | | | | | | | | |
| .150 | | | | .2860 | .3326 | .3598 | .3608 | | |
| .157 | | | | | | | | .2260 | |
| .163 | | .1804 | | | | | | | |
| .177 | | | .3118 | | | | | | |
| .229 | .0483 | | | | | | | | |
| .246 | | .0965 | | | | | | | |
| .250 | | | | .3336 | .3225 | .3318 | .3064 | | |
| .274 | | | .3367 | | | | | | |
| .345 | | | | | | | | .2647 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .3346 | | | | | | | |
| .400 | | | | .0000 | .3665 | | .3727 | | |
| .402 | | | .3519 | | | | | | |
| .418 | | | | | | | | | -.3612 |
| .497 | .2957 | | | | | | | | |
| .503 | | | | | | | | .2237 | |
| .550 | | | | .3777 | .3918 | | | | |
| .555 | | | .3731 | | | | | | |
| .600 | | | | | | | .2887 | | |
| .637 | | .3757 | | | | | | | |
| .650 | | | | | | .3027 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2163 | | | | |
| .725 | | | | -.0564 | | | | | |
| .730 | | | | | | | | | -.5268 |
| .750 | | | | | | -.0254 | -.0067 | | |
| .760 | | | .0223 | | | | | | |
| .775 | | | | .2718 | .2916 | | | | |
| .798 | | -.0022 | | | | | | | |
| .808 | | | .0840 | | | | | | |
| .824 | -.1725 | | | | | | | | |
| .830 | | -.0891 | | | | | | | |
| .850 | | | | .0198 | .0221 | -.1262 | | | |
| .857 | | | -.0867 | | | | | | |
| .862 | | | | | | | | -.1886 | |
| .865 | -.0560 | | | | | | | | |
| .879 | | -.1395 | | | | | | | |
| .900 | -.0966 | | | -.1002 | | | -.1835 | | |
| .905 | | | -.2200 | | | | | | |
| .919 | | -.1922 | | | | | | | |
| .950 | | | | -.2238 | -.1954 | -.2377 | | | |
| .953 | | | -.2878 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2259 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 7) = 6.315 BETAO ( 2) = -1.718

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.2995 | | -.3474 | | -.3804 | | |

ALPHAO( 7) = 6.318 BETAO ( 3) = .374

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0513 | -.1417 | .2550 | .7143 | .7097 | .6892 | .6413 | -.0053 | |
| .010 | .0012 | -.0553 | .3573 | .5263 | .4704 | .5083 | .5505 | | |
| .020 | .0041 | .0006 | .0000 | .4393 | .4252 | .4334 | .4300 | .1294 | |
| .040 | | .0099 | .2110 | | | | | | |
| .050 | -.0497 | | | .3579 | .2981 | .3625 | .3944 | | |
| .069 | | | | | | | | .1711 | |
| .080 | | | | .3342 | | | | | |
| .091 | | | .2461 | | | | | | |
| .086 | | .0796 | | | | | | | |
| .094 | .0561 | | | | | | | | |
| .150 | | | | 2506 | .3118 | .3391 | .3510 | | |
| .157 | | | | | | | | .2115 | |
| .163 | | .1222 | | | | | | | |
| .177 | | | .2597 | | | | | | |
| .229 | .1029 | | | | | | | | |
| .246 | | .2443 | | | | | | | |
| .250 | | | | .3058 | .3168 | .3246 | .3133 | | |
| .274 | | | .2821 | | | | | | |
| .345 | | | | | | | | .2147 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .3116 | | | | | | | |
| .400 | | | | .0000 | .3657 | | .3715 | | |
| .402 | | | .3503 | | | | | | |
| .418 | | | | | | | | | -.4113 |
| .497 | .2993 | | | | | | | | |
| .503 | | | | | | | | .1795 | |
| .550 | | | | .3342 | .3534 | | | | |
| .565 | | | .3292 | | | | | | |
| .600 | | | | | | | .2526 | | |
| .637 | | .3278 | | | | | | | |
| .650 | | | | | | .2699 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1757 | | | | |
| .725 | | | | .1765 | | | | | |
| .730 | | | | | | | | | -.5388 |
| .750 | | | | | | -.0497 | -.0283 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RCTL35)

ALPHAO( 7) = 6.316 BETAO ( 3) = .374

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | -.0396 | | | | | | |
| .775 | | | | .2017 | .2443 | | | | |
| .799 | | -.0631 | | | | | | | |
| .808 | | | .0115 | | | | | | |
| .834 | -.1433 | | | | | | | | |
| .839 | | -.0839 | | | | | | | |
| .850 | | | | .0049 | -.0126 | -.1515 | | | |
| .857 | | | -.1269 | | | | | | |
| .862 | | | | | | | | -.2129 | |
| .865 | -.0730 | | | | | | | | |
| .879 | | -.1433 | | | | | | | |
| .900 | -.1446 | | | -.1334 | | | -.2019 | | |
| .905 | | | -.2282 | | | | | | |
| .919 | | -.2139 | | | | | | | |
| .950 | | | | -.2481 | -.2220 | -.2579 | | | |
| .953 | | | -.2780 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2252 | | | | | | | | |
| 1.000 | | | -.2841 | | -.3072 | | -.3859 | | |

ALPHAO( 7) = 6.321 BETAO ( 4) = 2.475

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1285 | -.1868 | .1951 | .6553 | .6523 | .6443 | .6862 | .0027 | |
| .010 | -.0424 | -.1345 | .3129 | .5178 | .4541 | .5013 | .6244 | | |
| .020 | -.0078 | -.0455 | .0000 | .4228 | .4067 | .4279 | .5191 | .1721 | |
| .040 | | -.0352 | .3859 | | | | | | |
| .050 | -.0777 | | | .2930 | .3135 | .3447 | .4869 | | |
| .069 | | | | | | | | .2378 | |
| .080 | | | | .2703 | | | | | |
| .081 | | | .2809 | | | | | | |
| .088 | | .0407 | | | | | | | |
| .094 | .0369 | | | | | | | | |
| .150 | | | | .3012 | .3065 | .4284 | .4470 | | |
| .157 | | | | | | | | .2485 | |
| .163 | | .1260 | | | | | | | |
| .177 | | | .2288 | | | | | | |
| .229 | .0854 | | | | | | | | |
| .246 | | .2600 | | | | | | | |
| .250 | | | | .2980 | .2884 | .4216 | .4668 | | |
| .274 | | | .2995 | | | | | | |

APC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 7) = 6.321 BETAO ( 4) = 2.475

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | | |
| .362 | .0000 | | | | | | | .2097 | |
| .390 | | .2964 | | | | | | | |
| .400 | | | | .0000 | .5317 | | .4074 | | |
| .402 | | | .3221 | | | | | | |
| .418 | | | | | | | | | |
| .497 | .2740 | | | | | | | | -.4158 |
| 503 | | | | | | | | | |
| .550 | | | | .3716 | .3532 | | | .1699 | |
| .565 | | | .2930 | | | | | | |
| .600 | | | | | | | .2226 | | |
| .637 | | .2793 | | | | | | | |
| .650 | | | | | | .2243 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1238 | | | | |
| .725 | | | | -.1031 | | | | | |
| .730 | | | | | | | | | -.5421 |
| .750 | | | | | | -.0701 | -.0463 | | |
| .760 | | | -.0596 | | | | | | |
| .775 | | | | .1500 | .1918 | | | | |
| .798 | | -.0820 | | | | | | | |
| .808 | | | -.0132 | | | | | | |
| .834 | -.1087 | | | | | | | | |
| .839 | | -.0714 | | | | | | | |
| .850 | | | | -.0160 | -.0381 | -.1681 | | | |
| .857 | | | -.1344 | | | | | | |
| .862 | | | | | | | | -.2125 | |
| .865 | -.0644 | | | | | | | | |
| .879 | | -.1405 | | | | | | | |
| .900 | -.1388 | | | -.1464 | | | -.2091 | | |
| .905 | | | -.2109 | | | | | | |
| .919 | | -.2182 | | | | | | | |
| .950 | | | | -.2586 | -.2280 | -.2645 | | | |
| .953 | | | -.2655 | | | | | | |
| .955 | | .0000 | | | | | | | |
| 963 | -.1932 | | | | | | | | |
| 1.000 | | | -.2035 | | -.2362 | | -.3816 | | |

ARC97-019 (A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 7) = 6.324 BETAO ( 5) = 4.539

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1954 | -.1077 | -.0291 | -.1876 | -.1850 | -.4319 | .2711 | .0759 | |
| .010 | -.0450 | -.1004 | -.0513 | -.1185 | .2752 | .3122 | .4734 | | |
| .020 | -.0431 | -.0761 | -.1560 | -.2122 | -.5020 | .3432 | .3761 | .5625 | |
| .040 | | -.1423 | -.2275 | | | | | | |
| .050 | -.1047 | | | -.2758 | .1064 | .2871 | .3455 | | |
| .069 | | | | | | | | .4408 | |
| .080 | | | | -.1850 | | | | | |
| .081 | | | .0000 | | | | | | |
| .086 | | -.1695 | | | | | | | |
| .094 | -.1490 | | | | | | | | |
| .150 | | | | .6736 | -.0631 | .1005 | .3270 | | |
| .157 | | | | | | | | .4092 | |
| .163 | | -.2864 | | | | | | | |
| .177 | | | .1700 | | | | | | |
| .229 | -.0073 | | | | | | | | |
| .246 | | -.2867 | | | | | | | |
| .250 | | | | .1997 | -.1818 | .1537 | .2181 | | |
| .274 | | | .0818 | | | | | | |
| .345 | | | | | | | | .3624 | |
| .362 | -.1503 | | | | | | | | |
| .390 | | -.2594 | | | | | | | |
| .400 | | | | .1239 | -.2771 | | -.0697 | | |
| .402 | | | .0452 | | | | | | |
| .418 | | | | | | | | | -.0461 |
| .497 | .0000 | | | | | | | | |
| .503 | | | | | | | | .3193 | |
| .550 | | | | | -.0233 | .6975 | | | |
| .565 | | | -.0187 | | | | | | |
| .600 | | | | | | | -.1763 | | |
| .637 | | -.2420 | | | | | | | |
| .650 | | | | | | -.0683 | | | |
| .670 | | | | | | | | .3603 | |
| .700 | -.2048 | | | | .3175 | | | | |
| .725 | | | | -.1204 | | | | | |
| .730 | | | | | | | | | -.2204 |
| .750 | | | | | | -.2464 | -.2752 | | |
| .760 | | | -.0804 | | | | | | |
| .775 | | | | .0000 | .1898 | | | | |
| .798 | | -.1248 | | | | | | | |
| .808 | | | -.1386 | | | | | | |
| .834 | -.1985 | | | | | | | | |
| .839 | | .0067 | | | | | | | |
| .850 | | | | -.3134 | .0014 | -.2323 | | | |
| .857 | | | -.2114 | | | | | | |
| .862 | | | | | | | | .2440 | |

ARC97-019 !A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL35)

ALPHAO( 7) = 6.324 BETAO ( 5) = 4.539

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.1733 | | | | | | | | |
| .879 | | -.0830 | | | | | | | |
| .900 | -.1420 | | | -.3563 | | | .6138 | | |
| .905 | | | -.2809 | | | | | | |
| .919 | | -.1527 | | | | | | | |
| .950 | | | | -.3573 | -.2483 | .6783 | | | |
| .953 | | | -.2556 | | | | | | |
| .955 | | -.2132 | | | | | | | |
| .965 | -.0925 | | | | | | | | |
| 1.000 | | | -.0814 | | -.3464 | | .1397 | | |

ARC07-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.000 RN/FT = 2.500
ELV-1B = 8.000 ELV-0B = -4.000
RUDDER = .000 SPDBRK = .000

ALPHAO( 1) = -5.354 BETAO ( 1) = -4.160

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0024 | .0583 | .3206 | .7474 | .6869 | .6519 | .6744 | -.1055 | |
| .010 | -.0559 | .0363 | .2252 | .0711 | -.0302 | .0257 | .0535 | | |
| .020 | -.0758 | .0095 | .0000 | -.0458 | -.0796 | -.1070 | -.1102 | -.1834 | |
| .040 | | .0952 | .0900 | | | | | | |
| .050 | .0244 | | | -.0963 | -.1180 | -.1445 | -.1468 | | |
| .069 | | | | | | | | -.1936 | |
| .080 | | | | -.1126 | | | | | |
| .081 | | | -.0076 | | | | | | |
| .086 | | .0308 | | | | | | | |
| .094 | .1102 | | | | | | | | |
| .150 | | | | -.1023 | -.1277 | -.1207 | -.1448 | | |
| .157 | | | | | | | | -.1867 | |
| .163 | | .0794 | | | | | | | |
| .177 | | | -.0083 | | | | | | |
| .229 | .0906 | | | | | | | | |
| .246 | | .0734 | | | | | | | |
| .250 | | | | -.0535 | -.1197 | -.1265 | -.1235 | | |
| .274 | | | .0056 | | | | | | |
| .345 | | | | | | | | -.1838 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0449 | | | | | | | |
| .400 | | | | .0000 | -.0833 | | -.1277 | | |
| .402 | | | -.0196 | | | | | | |
| .418 | | | | | | | | | -.1894 |
| .497 | -.0435 | | | | | | | | |
| .503 | | | | | | | | -.1277 | |
| .550 | | | | .0769 | -.0410 | | | | |
| .565 | | | .0881 | | | | | | |
| .600 | | | | | | | -.1310 | | |
| .637 | | .1141 | | | | | | | |
| .650 | | | | | | -.1105 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1010 | | | | |
| .725 | | | | -.1001 | | | | | |
| .730 | | | | | | | | | -.2254 |
| .750 | | | | | | -.1419 | -.1965 | | |
| .760 | | | .1065 | | | | | | |
| .775 | | | | .2319 | .1864 | | | | |

AR397-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 1) = 8.354 BETAO ( 1) = -4.150

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .8720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .798 | | .0495 | | | | | | | |
| .808 | | | .2785 | | | | | | |
| .834 | -.0813 | | | | | | | | |
| .839 | | .0821 | | | | | | | |
| .850 | | | | .1879 | .1539 | -.0798 | | | |
| .857 | | | .1492 | | | | | | |
| .862 | | | | | | | | -.1999 | |
| .865 | -.0308 | | | | | | | | |
| .879 | | .1083 | | | | | | | |
| .900 | -.0419 | | | .0877 | | | -.1923 | | |
| .905 | | | .0176 | | | | | | |
| .919 | | .0043 | | | | | | | |
| .950 | | | | -.0014 | .0269 | -.1053 | | | |
| .953 | | | -.0455 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0689 | | | | | | | | |
| 1.000 | | | -.1227 | | -.1288 | | -.1618 | | |

ALPHAO( 1) = -6.341 BETAO ( 2) = -2.050

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0000 | .0303 | .2768 | .6453 | .6226 | .5899 | .6118 | -.1398 | |
| .010 | -.0392 | .0019 | .1138 | .0409 | -.0594 | -.0037 | .0203 | | |
| .020 | -.0291 | .0500 | .0000 | -.0639 | -.1043 | -.1321 | -.1316 | -.2099 | |
| .040 | | .0690 | .0670 | | | | | | |
| .050 | .0326 | | | -.1135 | -.1414 | -.1702 | -.1672 | | |
| .069 | | | | | | | | -.2168 | |
| .080 | | | | -.1144 | | | | | |
| .091 | | | -.0290 | | | | | | |
| .096 | | .0099 | | | | | | | |
| .094 | .0652 | | | | | | | | |
| .150 | | | | -.1135 | -.1540 | -.1362 | .1689 | | |
| .157 | | | | | | | | -.2135 | |
| .163 | | .0626 | | | | | | | |
| .174 | | | -.0138 | | | | | | |
| .229 | .0486 | | | | | | | | |
| .243 | | .0476 | | | | | | | |
| .270 | | | | -.0812 | -.1579 | -.1476 | -.1447 | | |
| .274 | | | -.0057 | | | | | | |
| .345 | | | | | | | | -.2247 | |
| .352 | .0000 | | | | | | | | |

ARC97-01S IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 1) = -6.341 BETAO ( 2) = -2.050

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .390 | | -.0570 | | | | | | | |
| .400 | | | | .0000 | -.0937 | | -.1545 | | |
| .402 | | | .0751 | | | | | | |
| .418 | | | | | | | | | -.2156 |
| .497 | -.0349 | | | | | | | | |
| .503 | | | | | | | | -.1575 | |
| .550 | | | | .0371 | -.0034 | | | | |
| .565 | | | .0295 | | | | | | |
| .600 | | | | | | | -.1594 | | |
| .637 | | .0596 | | | | | | | |
| .650 | | | | | | -.0980 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0892 | | | | |
| .725 | | | | -.0825 | | | | | |
| .730 | | | | | | | | | -.2483 |
| .750 | | | | | | -.1110 | -.2142 | | |
| .760 | | | .0592 | | | | | | |
| .775 | | | | .1842 | .1369 | | | | |
| .799 | | .0273 | | | | | | | |
| .808 | | | .2392 | | | | | | |
| .834 | -.1075 | | | | | | | | |
| .839 | | .0240 | | | | | | | |
| .850 | | | | .1473 | .1048 | -.0849 | | | |
| .857 | | | .1193 | | | | | | |
| .862 | | | | | | | | -.2055 | |
| .865 | -.0530 | | | | | | | | |
| .879 | | .0231 | | | | | | | |
| .900 | -.0631 | | | .0578 | | | -.2142 | | |
| .905 | | | -.0119 | | | | | | |
| .919 | | -.0027 | | | | | | | |
| .950 | | | | -.0239 | -.0024 | -.1042 | | | |
| .953 | | | -.0781 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0800 | | | | | | | | |
| 1.000 | | | -.1421 | | -.1228 | | -.1644 | | |

ARC97-019 1A81 (VAP.ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 1) = -6.322 BETAO ( 3) = .052

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0161 | -.0049 | .2460 | .5535 | .5476 | .5233 | .5396 | -.1717 | |
| .010 | -.0152 | .0149 | .1266 | -.0222 | -.0560 | -.0361 | -.0233 | | |
| .020 | -.0034 | .0200 | .0000 | -.1137 | -.1070 | -.1592 | -.1591 | -.2317 | |
| .040 | | .0123 | .0383 | | | | | | |
| .050 | -.0178 | | | -.1402 | -.1555 | -.1935 | -.1961 | | |
| .069 | | | | | | | | -.2396 | |
| .080 | | | | -.1220 | | | | | |
| .081 | | | -.0425 | | | | | | |
| .086 | | -.0211 | | | | | | | |
| .094 | .0343 | | | | | | | | |
| .150 | | | | -.0724 | -.1765 | -.1585 | -.1954 | | |
| .157 | | | | | | | | -.2396 | |
| .163 | | .0392 | | | | | | | |
| .177 | | | -.0574 | | | | | | |
| .229 | .0058 | | | | | | | | |
| .246 | | .0006 | | | | | | | |
| .250 | | | | -.0555 | -.1607 | -.1784 | -.1635 | | |
| .274 | | | -.0542 | | | | | | |
| .345 | | | | | | | | -.2556 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0844 | | | | | | | |
| .400 | | | | .0000 | -.0922 | | -.1763 | | |
| .402 | | | .0694 | | | | | | |
| .418 | | | | | | | | | -.2409 |
| .497 | -.0882 | | | | | | | | |
| .503 | | | | | | | | -.1956 | |
| .550 | | | | .0197 | -.0095 | | | | |
| .565 | | | .0196 | | | | | | |
| .600 | | | | | | | -.1769 | | |
| .637 | | .0410 | | | | | | | |
| .650 | | | | | | -.0764 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0693 | | | | |
| .725 | | | | .2391 | | | | | |
| .730 | | | | | | | | | -.2701 |
| .750 | | | | | | -.0728 | -.2110 | | |
| .760 | | | .0418 | | | | | | |
| .775 | | | | .1681 | .1065 | | | | |
| .798 | | -.0391 | | | | | | | |
| .808 | | | .1538 | | | | | | |
| .834 | -.1557 | | | | | | | | |
| .839 | | -.0435 | | | | | | | |
| .850 | | | | .1121 | .0796 | -.0842 | | | |
| .857 | | | 0480 | | | | | | |
| .862 | | | | | | | | -.1971 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 1) = -6.322 BETAO ( 3) = .062

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .885 | -.1242 | | | | | | | | |
| .879 | | .0355 | | | | | | | |
| .900 | -.0738 | | | .0210 | | | -.2117 | | |
| .905 | | | -.0490 | | | | | | |
| .919 | | -.0459 | | | | | | | |
| .950 | | | | -.0582 | -.0291 | -.1248 | | | |
| .953 | | | -.0878 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1033 | | | | | | | | |
| 1.000 | | | -.1628 | | -.1128 | | -.1920 | | |

ALPHAO( 1) = -6.302 BETAO ( 4) = 2.174

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0260 | -.0170 | .2405 | .5458 | .4369 | .4017 | .4450 | -.1954 | |
| .010 | -.0034 | -.0125 | .1677 | -.0269 | -.1324 | -.0834 | -.0529 | | |
| .020 | -.0164 | -.0267 | .0000 | -.1229 | -.1644 | -.1901 | -.1629 | -.2495 | |
| .040 | | -.0296 | .0432 | | | | | | |
| .050 | .0284 | | | -.1248 | -.1892 | -.2183 | -.2140 | | |
| .069 | | | | | | | | -.2593 | |
| .080 | | | | -.1210 | | | | | |
| .081 | | | .0138 | | | | | | |
| .086 | | .0218 | | | | | | | |
| .094 | .0067 | | | | | | | | |
| .150 | | | | -.1312 | -.1844 | -.1682 | -.2130 | | |
| .157 | | | | | | | | -.2610 | |
| .163 | | .0272 | | | | | | | |
| .177 | | | -.0263 | | | | | | |
| .229 | -.0186 | | | | | | | | |
| .246 | | -.0129 | | | | | | | |
| .250 | | | | -.0787 | -.1463 | -.1852 | -.1784 | | |
| .274 | | | -.0877 | | | | | | |
| .345 | | | | | | | | -.2819 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0236 | | | | | | | |
| .400 | | | | .0000 | -.0876 | | -.1987 | | |
| .402 | | | .0730 | | | | | | |
| .418 | | | | | | | | | -.2594 |
| .487 | .0200 | | | | | | | | |
| .503 | | | | | | | | -.2302 | |
| .550 | | | | .0217 | .0009 | | | | |

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

AR097-019 (AB) CVAP(ALLHL SEALED) LEFT WING BOT. (REF L351

ALPHA0( 1) = -8.302 BETA0 ( 4) = 2.174

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .0442 | | | | | | |
| .600 | | | | | | | -.1846 | | |
| .637 | | .0553 | | | | | | | |
| .650 | | | | | | -.0273 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0554 | | | | |
| .725 | | | | .1490 | | | | | |
| .730 | | | | | | | | | -.2842 |
| .750 | | | | | | -.0584 | -.1839 | | |
| .760 | | | -.0499 | | | | | | |
| .775 | | | | .1938 | .1396 | | | | |
| .798 | | -.1012 | | | | | | | |
| .808 | | | -.0137 | | | | | | |
| .834 | -.1751 | | | | | | | | |
| .839 | | -.1267 | | | | | | | |
| .850 | | | | .0793 | .0733 | -.0891 | | | |
| .857 | | | -.0240 | | | | | | |
| .862 | | | | | | | | -.1962 | |
| .865 | -.1436 | | | | | | | | |
| .879 | | -.1228 | | | | | | | |
| .900 | -.1280 | | | -.0293 | | | -.1279 | | |
| .905 | | | -.1094 | | | | | | |
| .919 | | -.0866 | | | | | | | |
| .950 | | | | -.1123 | -.0760 | -.1385 | | | |
| .953 | | | -.1353 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1180 | | | | | | | | |
| 1.000 | | | -.1857 | | -.1369 | | -.1171 | | |

ALPHA0( 1) = -6.206 BETA0 ( 5) = 4.251

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0375 | -.0430 | .1925 | .4859 | .4046 | .3282 | .3634 | -.2287 | |
| .010 | -.0331 | -.0436 | .1241 | -.0385 | -.1637 | -.1178 | -.1111 | | |
| .020 | -.0419 | -.0485 | .0000 | -.1183 | -.1929 | -.2165 | -.2147 | -.2694 | |
| .040 | | -.0436 | .0495 | | | | | | |
| .050 | .0238 | | | -.1353 | -.2159 | -.2420 | -.2456 | | |
| .069 | | | | | | | | -.2799 | |
| .080 | | | | -.1295 | | | | | |
| .081 | | | -.0255 | | | | | | |
| .088 | | .0141 | | | | | | | |

ARC97-019 (AB) (VAPIALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHA0( 1) = -6.286 BETA0 ( 5) = 4.251

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0398 | | | | | | | | |
| .150 | | | | | -.1478 | -.2117 | -.1875 | -.2416 | |
| .157 | | | | | | | | | .2816 |
| .163 | | .0687 | | | | | | | |
| .177 | | | -.0420 | | | | | | |
| .229 | -.0419 | | | | | | | | |
| .246 | | -.0372 | | | | | | | |
| .250 | | | | | -.1122 | -.1783 | -.2118 | -.1928 | |
| .274 | | | -.0437 | | | | | | |
| .345 | | | | | | | | -.3003 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0421 | | | | | | | |
| .400 | | | | .0000 | -.0204 | | -.2142 | | |
| .402 | | | .0813 | | | | | | |
| .418 | | | | | | | | | -.2837 |
| .497 | -.0285 | | | | | | | | |
| .503 | | | | | | | | -.2573 | |
| .550 | | | | .0131 | -.0165 | | | | |
| .555 | | | .0378 | | | | | | |
| .600 | | | | | | | -.1158 | | |
| .637 | | .0211 | | | | | | | |
| .650 | | | | | | -.0445 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0062 | | | | |
| .725 | | | | -.0158 | | | | | |
| .730 | | | | | | | | | -.3021 |
| .750 | | | | | | -.1026 | -.1373 | | |
| .760 | | | -.1128 | | | | | | |
| .775 | | | | .0141 | .0735 | | | | |
| .799 | | -.1422 | | | | | | | |
| .808 | | | -.0865 | | | | | | |
| .834 | -.1668 | | | | | | | | |
| .839 | | -.1170 | | | | | | | |
| .850 | | | | -.0100 | .0234 | -.1121 | | | |
| .857 | | | -.1118 | | | | | | |
| .862 | | | | | | | | -.1977 | |
| .865 | -.1214 | | | | | | | | |
| .873 | | -.1238 | | | | | | | |
| .900 | -.1423 | | | -.0875 | | | -.1678 | | |
| .905 | | | -.1245 | | | | | | |
| .919 | | -.1636 | | | | | | | |
| .950 | | | | -.1491 | -.1175 | -.1462 | | | |
| .953 | | | -.1667 | | | | | | |
| .955 | | 0000 | | | | | | | |
| .995 | -.1232 | | | | | | | | |

AR297-019 TABLE LVAR(ALLML SEALED) LEFT WING BOT. (RETL36)

ALPHA(1,1) = -6.286 BETA(1,1) = 4.251

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2950 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1894 | | -.1545 | | -.1422 | | |

ALPHA(1,2) = -4.273 BETA(1,1) = -6.247

SECTION 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2950 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0254 | .0973 | .3989 | .8223 | .7940 | .7608 | .7727 | -.0349 | |
| .010 | -.0346 | .1265 | .2516 | .1359 | .0484 | .0945 | .1378 | | |
| .020 | -.0596 | .1203 | .0000 | .0132 | -.0099 | -.0355 | -.0426 | -.0363 | |
| .040 | | .1086 | .1462 | | | | | | |
| .059 | .0033 | | | -.0393 | -.0510 | -.0776 | -.0806 | | |
| .069 | | | | | | | | -.1140 | |
| .080 | | | | -.0564 | | | | | |
| .081 | | | .0272 | | | | | | |
| .095 | | .0646 | | | | | | | |
| .099 | .1650 | | | | | | | | |
| .150 | | | | -.0614 | -.0727 | -.0655 | -.0812 | | |
| .157 | | | | | | | | -.1045 | |
| .163 | | .1268 | | | | | | | |
| .179 | | | .0437 | | | | | | |
| .239 | .0989 | | | | | | | | |
| .246 | | .0649 | | | | | | | |
| .250 | | | | -.0068 | -.0797 | -.0278 | -.0677 | | |
| .274 | | | .0567 | | | | | | |
| .345 | | | | | | | | -.0855 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0019 | | | | | | | |
| .410 | | | | .0000 | -.0310 | | -.0740 | | |
| .426 | | | -.0327 | | | | | | |
| .438 | | | | | | | | | -.105 |
| .497 | .0163 | | | | | | | | |
| .503 | | | | | | | | -.0753 | |
| .550 | | | | .1163 | .0014 | | | | |
| .565 | | | .1567 | | | | | | |
| .593 | | | | | | | -.0858 | | |
| .637 | | .1788 | | | | | | | |
| .650 | | | | | | -.0740 | | | |
| .673 | | | | | | | | .0000 | |
| .709 | 0000 | | | | .1202 | | | | |
| .717 | | | | .0090 | | | | | |
| .753 | | | | | | | | | -.1587 |
| .760 | | | | | | -.1369 | -.1643 | | |

ARC97-019 TAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHA0( 2) = -4.273 BETA0 ( 1) = -6.247

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .3203 | | | | | | |
| .775 | | | | .3204 | .2294 | | | | |
| .798 | | .1101 | | | | | | | |
| .808 | | | .3585 | | | | | | |
| .834 | -.0749 | | | | | | | | |
| .839 | | .2085 | | | | | | | |
| .860 | | | | .2811 | .2291 | -.0858 | | | |
| .867 | | | .2095 | | | | | | |
| .882 | | | | | | | | -.1649 | |
| .885 | -.0150 | | | | | | | | |
| .879 | | .1596 | | | | | | | |
| .900 | .0472 | | | .1562 | | | -.1708 | | |
| .905 | | | .0567 | | | | | | |
| .919 | | .0347 | | | | | | | |
| .950 | | | | .0526 | .0785 | -.0786 | | | |
| .953 | | | -.0158 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0757 | | | | | | | | |
| 1.000 | | | -.1091 | | -.1482 | | -.1643 | | |

ALPHA0( 2) = -4.265 BETA0 ( 2) = -4.183

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0080 | .0541 | .3413 | .7483 | .7030 | .6879 | .7010 | -.0662 | |
| .010 | -.0637 | .0781 | .2475 | .0967 | .0135 | .0589 | .0955 | | |
| .020 | -.0817 | .0852 | .0000 | -.0195 | -.0405 | -.0674 | -.0730 | -.1291 | |
| .040 | | .0758 | .0909 | | | | | | |
| .050 | -.0134 | | | -.0691 | -.0796 | -.1053 | -.1116 | | |
| .069 | | | | | | | | -.1406 | |
| .080 | | | | -.0848 | | | | | |
| .081 | | | -.0149 | | | | | | |
| .086 | | .0318 | | | | | | | |
| .094 | .1191 | | | | | | | | |
| .150 | | | | -.0892 | -.1003 | -.0936 | -.1119 | | |
| .157 | | | | | | | | -.1311 | |
| .163 | | .0736 | | | | | | | |
| .177 | | | .0013 | | | | | | |
| .229 | .0720 | | | | | | | | |
| .246 | | .0492 | | | | | | | |
| .250 | | | | -.0406 | -.0987 | -.0982 | -.0983 | | |
| .274 | | | .0136 | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 2) = -4.265 BETAO ( 2) = -4.183

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | -.1088 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0390 | | | | | | | |
| .400 | | | | .0000 | -.0690 | | -.1012 | | |
| .402 | | | -.0265 | | | | | | |
| .418 | | | | | | | | | -.1392 |
| .497 | -.0490 | | | | | | | | |
| .503 | | | | | | | | -.0973 | |
| .550 | | | | .0852 | -.0328 | | | | |
| .555 | | | .1068 | | | | | | |
| .600 | | | | | | | -.1075 | | |
| .637 | | .1390 | | | | | | | |
| .650 | | | | | | -.1073 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0964 | | | | |
| .725 | | | | .0295 | | | | | |
| .730 | | | | | | | | | -.1759 |
| .750 | | | | | | -.1547 | -.1822 | | |
| .760 | | | .1805 | | | | | | |
| .775 | | | | .2570 | .1837 | | | | |
| .798 | | .0427 | | | | | | | |
| .809 | | | .2879 | | | | | | |
| .834 | -.0863 | | | | | | | | |
| .839 | | .1429 | | | | | | | |
| .850 | | | | .2088 | .1804 | -.0828 | | | |
| .857 | | | .1585 | | | | | | |
| .862 | | | | | | | | -.1785 | |
| .865 | -.0368 | | | | | | | | |
| .879 | | .0925 | | | | | | | |
| .900 | .0213 | | | .1082 | | | -.1851 | | |
| .905 | | | .0246 | | | | | | |
| .919 | | .0220 | | | | | | | |
| .950 | | | | .0183 | .0451 | -.0910 | | | |
| .953 | | | -.0382 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .955 | -.0734 | | | | | | | | |
| 1.000 | | | -.1213 | | -.1434 | | -.1704 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 2) = -4.235 BETAO ( 3) = .039

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0368 | -.0100 | .2173 | .5428 | .5893 | .5370 | .5634 | -.1395 | |
| .010 | -.0522 | .0110 | .0923 | .0244 | -.0470 | -.0094 | .0193 | | |
| .020 | -.0352 | .0091 | .0000 | -.0583 | -.0938 | -.1232 | -.1251 | -.1873 | |
| .040 | | .0000 | .0289 | | | | | | |
| .050 | -.0669 | | | -.1025 | -.1326 | -.1536 | -.1607 | | |
| .069 | | | | | | | | -.1926 | |
| .080 | | | | -.1057 | | | | | |
| .081 | | | -.0532 | | | | | | |
| .086 | | -.0339 | | | | | | | |
| .094 | .0429 | | | | | | | | |
| .150 | | | | -.0651 | -.1517 | -.1323 | -.1617 | | |
| .157 | | | | | | | | -.1877 | |
| .163 | | .0201 | | | | | | | |
| .177 | | | -.0425 | | | | | | |
| .229 | -.0005 | | | | | | | | |
| .246 | | -.0024 | | | | | | | |
| .250 | | | | -.0302 | -.1471 | -.1464 | -.1375 | | |
| .274 | | | -.0455 | | | | | | |
| .345 | | | | | | | | -.1526 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0744 | | | | | | | |
| .400 | | | | .0000 | -.0813 | | -.1510 | | |
| .402 | | | .0700 | | | | | | |
| .418 | | | | | | | | | -.2039 |
| .497 | -.0744 | | | | | | | | |
| .503 | | | | | | | | -.1493 | |
| .550 | | | | .0465 | -.0005 | | | | |
| .565 | | | .0370 | | | | | | |
| .600 | | | | | | | -.1598 | | |
| .637 | | .0558 | | | | | | | |
| .650 | | | | | | -.0872 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0995 | | | | |
| .725 | | | | -.2636 | | | | | |
| .730 | | | | | | | | | -.2481 |
| .750 | | | | | | -.0774 | -.2044 | | |
| .760 | | | .0671 | | | | | | |
| .775 | | | | .1922 | .1345 | | | | |
| .798 | | -.0098 | | | | | | | |
| .808 | | | .1683 | | | | | | |
| .834 | -.1475 | | | | | | | | |
| .839 | | -.0263 | | | | | | | |
| .850 | | | | .1213 | .1056 | -.0824 | | | |
| .857 | | | .0506 | | | | | | |
| .862 | | | | | | | | -.1803 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 2) = -4.235 BETAO ( 3) = .039

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.1116 | | | | | | | | |
| .879 | | .0138 | | | | | | | |
| .900 | -.0639 | | | .0241 | | | -.2008 | | |
| .905 | | | -.0603 | | | | | | |
| .919 | | -.0605 | | | | | | | |
| .950 | | | | -.0589 | -.0232 | -.0998 | | | |
| .953 | | | -.1004 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1051 | | | | | | | | |
| 1.000 | | | -.1726 | | -.1379 | | -.1910 | | |

ALPHAO( 2) = -4.200 BETAO ( 4) = 4.234

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0683 | -.0615 | .1890 | .4946 | .3936 | .3575 | .4051 | -.1960 | |
| .010 | -.0641 | -.0592 | .1275 | -.0428 | -.1366 | -.0900 | -.0474 | | |
| .020 | -.0742 | -.0621 | .0000 | -.1261 | -.1647 | -.1711 | -.1661 | -.2367 | |
| .040 | | -.0621 | .0414 | | | | | | |
| .050 | -.0301 | | | -.1357 | -.1874 | -.1945 | -.1959 | | |
| .059 | | | | | | | | -.2400 | |
| .080 | | | | -.1229 | | | | | |
| .081 | | | -.0348 | | | | | | |
| .086 | | -.0028 | | | | | | | |
| .094 | -.0569 | | | | | | | | |
| .150 | | | | -.1210 | -.1680 | -.1573 | -.1982 | | |
| .157 | | | | | | | | -.2377 | |
| .163 | | 0562 | | | | | | | |
| .177 | | | -.0519 | | | | | | |
| .229 | -.0477 | | | | | | | | |
| .245 | | -.0418 | | | | | | | |
| .250 | | | | -.1005 | -.1295 | -.1730 | -.1694 | | |
| .274 | | | -.0451 | | | | | | |
| .345 | | | | | | | | -.1947 | |
| .362 | .0020 | | | | | | | | |
| .390 | | -.0589 | | | | | | | |
| .400 | | | | .0000 | .0186 | | -.1744 | | |
| .402 | | | .0929 | | | | | | |
| .418 | | | | | | | | | -.2462 |
| .497 | -.0418 | | | | | | | | |
| .503 | | | | | | | | -.1668 | |
| .550 | | | | .0603 | .0330 | | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL 36)

ALPHAO( 2) = -4.200 BETAO ( 4) = 4.234

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .0637 | | | | | | |
| .600 | | | | | | | -.1330 | | |
| .637 | | .0400 | | | | | | | |
| .650 | | | | | | -.0074 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0080 | | | | |
| .725 | | | | -.3224 | | | | | |
| .730 | | | | | | | | | -.2737 |
| .750 | | | | | | -.0945 | -.1012 | | |
| .760 | | | -.1044 | | | | | | |
| .775 | | | | | .0388 | .1084 | | | |
| .798 | | -.1313 | | | | | | | |
| .808 | | | -.0736 | | | | | | |
| .834 | -.1607 | | | | | | | | |
| .839 | | -.0974 | | | | | | | |
| .850 | | | | | .0009 | .0295 | -.0647 | | |
| .857 | | | -.0973 | | | | | | |
| .862 | | | | | | | | -.1718 | |
| .865 | -.1112 | | | | | | | | |
| .879 | | -.1152 | | | | | | | |
| .900 | -.1371 | | | -.0848 | | | -.1274 | | |
| .905 | | | -.1180 | | | | | | |
| .919 | | -.1604 | | | | | | | |
| .950 | | | | -.1482 | -.1214 | -.1197 | | | |
| .953 | | | -.1669 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1211 | | | | | | | | |
| 1.000 | | | -.1944 | | -.1753 | | -.1383 | | |

ALPHAO( 2) = -4.132 BETAO ( 5) = 6.302

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0786 | -.0892 | .1397 | .4526 | .3652 | .3000 | .3188 | -.2264 | |
| .010 | -.0618 | -.0940 | .1081 | -.0522 | -.1659 | -.1146 | -.11.5 | | |
| .020 | -.0697 | -.0908 | .0000 | -.1335 | -.1970 | -.2058 | -.2101 | -.2425 | |
| .040 | | -.0869 | .0225 | | | | | | |
| .050 | -.0235 | | | -.1594 | -.2216 | -.2315 | -.2379 | | |
| .059 | | | | | | | | -.2418 | |
| .080 | | | | -.1559 | | | | | |
| .081 | | | -.0665 | | | | | | |
| .086 | | -.0325 | | | | | | | |

ARC97-019 !A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHA0( 2) = -4.192 BETA0 ( 5) = 6.302

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0559 | | | | | | | | |
| .150 | | | | -.1236 | -.2100 | -.1849 | -.2281 | | |
| .157 | | | | | | | | -.2317 | |
| .163 | | .0103 | | | | | | | |
| .177 | | | -.0772 | | | | | | |
| .229 | -.0716 | | | | | | | | |
| .246 | | -.0285 | | | | | | | |
| .250 | | | | -.0739 | -.1634 | -.2022 | -.1837 | | |
| .274 | | | -.0613 | | | | | | |
| .345 | | | | | | | | -.2320 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0146 | | | | | | | |
| .400 | | | | .0000 | .0005 | | -.1785 | | |
| .402 | | | .0825 | | | | | | |
| .418 | | | | | | | | | -.2293 |
| .497 | -.0729 | | | | | | | | |
| .503 | | | | | | | | -.1795 | |
| .550 | | | | .0382 | .0349 | | | | |
| .565 | | | .0203 | | | | | | |
| .600 | | | | | | | -.0551 | | |
| .637 | | -.0415 | | | | | | | |
| .650 | | | | | | .0044 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0207 | | | | |
| .725 | | | | .3386 | | | | | |
| .730 | | | | | | | | | -.2081 |
| .750 | | | | | | -.0771 | -.0761 | | |
| .760 | | | -.1187 | | | | | | |
| .775 | | | | .0039 | .0516 | | | | |
| .798 | | -.0997 | | | | | | | |
| .808 | | | -.0257 | | | | | | |
| .834 | -.1155 | | | | | | | | |
| .839 | | -.0923 | | | | | | | |
| .850 | | | | -.0640 | -.0413 | -.0817 | | | |
| .857 | | | -.0804 | | | | | | |
| .862 | | | | | | | | -.1314 | |
| .855 | -.1083 | | | | | | | | |
| .879 | | -.1301 | | | | | | | |
| .900 | -.1289 | | | -.1138 | | | -.0452 | | |
| .905 | | | -.1585 | | | | | | |
| .919 | | -.1583 | | | | | | | |
| .950 | | | | -.1604 | -.1476 | -.1299 | | | |
| .953 | | | -.1964 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1116 | | | | | | | | |

ARC97-019 (A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 2) = -4.192 BETAO ( 5) = 6.302

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1935 | | -.1676 | | -.1201 | | |

ALPHAO( 3) = -2.186 BETAO ( 1) = -6.258

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0154 | .0992 | .4123 | .8475 | .7979 | .7786 | .7929 | .0157 | |
| .010 | -.0326 | .1112 | .2759 | .1704 | .0813 | .1237 | .1826 | | |
| .020 | -.0595 | .1186 | .0000 | .0400 | .0298 | .0051 | -.0023 | -.0415 | |
| .040 | | .1115 | .1764 | | | | | | |
| .050 | -.0117 | | | -.0097 | -.0099 | -.0369 | -.0406 | | |
| .069 | | | | | | | | -.0589 | |
| .080 | | | | -.0231 | | | | | |
| .081 | | | .0436 | | | | | | |
| .095 | | .0736 | | | | | | | |
| .094 | .1531 | | | | | | | | |
| .150 | | | | -.0478 | -.0413 | -.0292 | -.0410 | | |
| .157 | | | | | | | | -.0559 | |
| .163 | | .1416 | | | | | | | |
| .177 | | | .0601 | | | | | | |
| .229 | .0935 | | | | | | | | |
| .246 | | .1023 | | | | | | | |
| .250 | | | | .0105 | -.0523 | -.0331 | -.0338 | | |
| .274 | | | .0443 | | | | | | |
| .345 | | | | | | | | -.0392 | |
| .352 | .0000 | | | | | | | | |
| .390 | | .0150 | | | | | | | |
| .400 | | | | .0000 | -.0125 | | -.0359 | | |
| .402 | | | -.0360 | | | | | | |
| .418 | | | | | | | | | -.0501 |
| .497 | -.0110 | | | | | | | | |
| .503 | | | | | | | | -.0454 | |
| .550 | | | | .1313 | .0202 | | | | |
| .565 | | | .1693 | | | | | | |
| .600 | | | | | | | -.0572 | | |
| .637 | | .1722 | | | | | | | |
| .650 | | | | | | -.0531 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1487 | | | | |
| .725 | | | | -.1580 | | | | | |
| .730 | | | | | | | | | -.1103 |
| .750 | | | | | | -.1199 | -.1462 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 3) = -2.186 BETAO ( 1) = -6.258

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .3309 | | | | | | |
| .775 | | | | .3399 | .2515 | | | | |
| .798 | | .2854 | | | | | | | |
| .808 | | | .3649 | | | | | | |
| .834 | -.0585 | | | | | | | | |
| .839 | | .2501 | | | | | | | |
| .850 | | | | .3087 | .2538 | -.0930 | | | |
| .857 | | | .2289 | | | | | | |
| .862 | | | | | | | | -.1424 | |
| .865 | .0270 | | | | | | | | |
| .879 | | .1932 | | | | | | | |
| .900 | .0571 | | | .1777 | | | -.1662 | | |
| .905 | | | .0812 | | | | | | |
| .919 | | .0409 | | | | | | | |
| .950 | | | | .0664 | .0919 | -.0606 | | | |
| .953 | | | .0002 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0853 | | | | | | | | |
| 1.000 | | | -.1125 | | -.1632 | | -.1597 | | |

ALPHAO( 3) = -2.175 BETAO ( 2) = -2.080

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0449 | .0015 | .2702 | .6810 | .6509 | .6362 | .6641 | -.0556 | |
| .010 | -.0659 | .0206 | .2300 | .0881 | .0158 | .0540 | .1052 | | |
| .020 | -.0299 | .0550 | .0000 | -.0233 | -.0318 | -.0603 | -.0595 | -.1015 | |
| .040 | | .0465 | .0759 | | | | | | |
| .050 | -.0577 | | | -.0682 | -.0703 | -.0952 | -.0974 | | |
| .069 | | | | | | | | -.1163 | |
| .080 | | | | -.0800 | | | | | |
| .081 | | | -.0322 | | | | | | |
| .086 | | .0028 | | | | | | | |
| .094 | .0435 | | | | | | | | |
| .150 | | | | -.1037 | -.0978 | -.0814 | -.0977 | | |
| .157 | | | | | | | | -.1110 | |
| .163 | | .0469 | | | | | | | |
| .177 | | | -.0102 | | | | | | |
| .229 | .0435 | | | | | | | | |
| .246 | | .0428 | | | | | | | |
| .250 | | | | -.0528 | -.1075 | -.0912 | -.0884 | | |
| .274 | | | .0037 | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 3) = -2.175 BETAO ( 2) = -2.080

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9780 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | -.0978 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0500 | | | | | | | |
| .400 | | | | .0000 | -.0837 | | -.0968 | | |
| .402 | | | .0727 | | | | | | |
| .418 | | | | | | | | | -.1152 |
| .497 | -.0557 | | | | | | | | |
| .503 | | | | | | | | -.1015 | |
| .550 | | | | .0837 | -.0182 | | | | |
| .565 | | | .0723 | | | | | | |
| .600 | | | | | | | -.1114 | | |
| .637 | | .0936 | | | | | | | |
| .650 | | | | | | -.1036 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1323 | | | | |
| .725 | | | | -.0400 | | | | | |
| .730 | | | | | | | | | -.1735 |
| .750 | | | | | | -.1085 | -.1852 | | |
| .760 | | | .1416 | | | | | | |
| .775 | | | | .2355 | .1852 | | | | |
| .798 | | .0480 | | | | | | | |
| .808 | | | .2533 | | | | | | |
| .834 | -.0839 | | | | | | | | |
| .839 | | .0826 | | | | | | | |
| .850 | | | | .1779 | .1688 | -.0444 | | | |
| .857 | | | .1400 | | | | | | |
| .862 | | | | | | | | -.1568 | |
| .865 | -.0453 | | | | | | | | |
| .879 | | .0483 | | | | | | | |
| .900 | -.0823 | | | .0841 | | | -.1852 | | |
| .905 | | | .0063 | | | | | | |
| .919 | | -.0080 | | | | | | | |
| .950 | | | | -.0039 | .0270 | -.0703 | | | |
| .953 | | | -.0597 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0791 | | | | | | | | |
| 1.000 | | | -.1520 | | -.1514 | | -.1818 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 3) = -2.148 BETAO ( 3) = 2.137

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0812 | -.0443 | .1671 | .4873 | .5269 | .5101 | .5141 | -.1322 | |
| .010 | -.0751 | -.0310 | .1270 | .0357 | -.0457 | -.0079 | .0157 | | |
| .020 | -.0682 | -.0517 | .0000 | -.0438 | -.0897 | -.1139 | -.1183 | -.1634 | |
| .040 | | -.0582 | .0314 | | | | | | |
| .050 | -.1042 | | | -.0319 | -.1201 | -.1502 | -.1497 | | |
| .069 | | | | | | | | -.1700 | |
| .080 | | | | -.0457 | | | | | |
| .081 | | | .0103 | | | | | | |
| .086 | | -.0245 | | | | | | | |
| .094 | -.0227 | | | | | | | | |
| .150 | | | | -.0858 | -.1091 | -.1239 | -.1494 | | |
| .157 | | | | | | | | -.1631 | |
| .163 | | .0547 | | | | | | | |
| .177 | | | -.0062 | | | | | | |
| .229 | -.0463 | | | | | | | | |
| .246 | | -.0107 | | | | | | | |
| .250 | | | | -.0492 | -.1043 | -.1216 | -.1302 | | |
| .274 | | | -.0454 | | | | | | |
| .345 | | | | | | | | -.1374 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0181 | | | | | | | |
| .400 | | | | .0000 | -.0741 | | -.1335 | | |
| .402 | | | .0972 | | | | | | |
| .418 | | | | | | | | | -.1732 |
| .497 | -.0037 | | | | | | | | |
| .503 | | | | | | | | -.1387 | |
| .550 | | | | .0963 | .0698 | | | | |
| .565 | | | .0995 | | | | | | |
| .600 | | | | | | | -.1193 | | |
| .637 | | .1056 | | | | | | | |
| .650 | | | | | | .0537 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1237 | | | | |
| .725 | | | | -.5252 | | | | | |
| .730 | | | | | | | | | -.2290 |
| .750 | | | | | | .0131 | -.1817 | | |
| .760 | | | -.0043 | | | | | | |
| .775 | | | | .2207 | .1970 | | | | |
| .799 | | -.0742 | | | | | | | |
| .808 | | | .0865 | | | | | | |
| .834 | -.1805 | | | | | | | | |
| .839 | | -.0897 | | | | | | | |
| .850 | | | | .0779 | .1006 | -.0197 | | | |
| .857 | | | -.0257 | | | | | | |
| .852 | | | | | | | | -.1506 | |

AR197-019 IA81 CVAP(ALUM. SEALED) LEFT WING BOT. (RETURN)

ALPHAO( 3) = -2.146 BETAO ( 3) = 2.137

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.1491 | | | | | | | | |
| .879 | | -.0835 | | | | | | | |
| .900 | -.1327 | | | -.0260 | | | -.0457 | | |
| .905 | | | -.1207 | | | | | | |
| .919 | | -.1172 | | | | | | | |
| .950 | | | | -.1085 | -.0667 | -.0849 | | | |
| .953 | | | -.1638 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1264 | | | | | | | | |
| 1.000 | | | -.1998 | | -.1739 | | -.1621 | | |

ALPHAO( 3) = -2.124 BETAO ( 4) = 6.280

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0956 | -.1039 | .1157 | .3790 | .3675 | .3492 | .3682 | -.1133 | |
| .010 | -.0901 | -.1071 | .1081 | -.0621 | -.1267 | -.0713 | -.0389 | | |
| .020 | -.1029 | -.0997 | .0000 | -.1178 | -.1593 | -.1598 | -.1520 | -.1484 | |
| .040 | | -.0942 | .0202 | | | | | | |
| .050 | -.1310 | | | -.1191 | -.1781 | -.1819 | -.1791 | | |
| .069 | | | | | | | | -.1549 | |
| .080 | | | | -.1123 | | | | | |
| .081 | | | -.0730 | | | | | | |
| .086 | | -.0476 | | | | | | | |
| .094 | -.0676 | | | | | | | | |
| .150 | | | | -.0870 | -.1477 | -.1471 | -.1765 | | |
| .157 | | | | | | | | -.1428 | |
| .163 | | -.0010 | | | | | | | |
| .177 | | | -.0778 | | | | | | |
| .229 | -.0741 | | | | | | | | |
| .246 | | -.0339 | | | | | | | |
| .250 | | | | -.0095 | -.1079 | -.1474 | -.1287 | | |
| .274 | | | -.0002 | | | | | | |
| .345 | | | | | | | | -.0717 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0514 | | | | | | | |
| .400 | | | | .0000 | .0665 | | -.1146 | | |
| .402 | | | .1207 | | | | | | |
| .418 | | | | | | | | | -.1340 |
| .497 | -.0865 | | | | | | | | |
| .503 | | | | | | | | -.0022 | |
| .550 | | | | .1058 | .1418 | | | | |

ARC97-019 !A81 LVAP(ALLRL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 3) = -2.124 BETAO ( 4) = 6.280

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .0813 | | | | | | |
| .600 | | | | | | | .1147 | | |
| .637 | | .0230 | | | | | | | |
| .650 | | | | | | .1000 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0668 | | | | |
| .725 | | | | -.0476 | | | | | |
| .730 | | | | | | | | | -.0761 |
| .750 | | | | | | -.0092 | .0476 | | |
| .760 | | | -.0934 | | | | | | |
| .775 | | | | .0398 | .1146 | | | | |
| .798 | | -.0814 | | | | | | | |
| .808 | | | -.0093 | | | | | | |
| .834 | -.1062 | | | | | | | | |
| .839 | | -.0753 | | | | | | | |
| .850 | | | | -.0323 | -.0034 | -.0399 | | | |
| .857 | | | -.0795 | | | | | | |
| .852 | | | | | | | | -.0192 | |
| .865 | -.0951 | | | | | | | | |
| .879 | | -.1276 | | | | | | | |
| .900 | -.1310 | | | -.0892 | | | .0056 | | |
| .905 | | | -.1516 | | | | | | |
| .919 | | -.1625 | | | | | | | |
| .950 | | | | -.1458 | -.1402 | -.1226 | | | |
| .953 | | | -.1898 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1019 | | | | | | | | |
| 1.000 | | | -.1917 | | -.1883 | | -.1202 | | |

ALPHAO( 4) = -.096 BETAO ( 1) = -6.268

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0122 | .0295 | .4181 | .8704 | .8061 | .8078 | .8138 | .0692 | |
| .010 | -.0336 | .0574 | .2937 | .2047 | .1173 | .1636 | .2478 | | |
| .020 | -.0592 | .0485 | .0000 | .0698 | .0768 | .0558 | .0468 | .0255 | |
| .040 | | .1089 | .1804 | | | | | | |
| .050 | .0310 | | | .0156 | .0374 | .0134 | .0114 | | |
| .069 | | | | | | | | .0012 | |
| .080 | | | | .0070 | | | | | |
| .081 | | | .0713 | | | | | | |
| .086 | | .0774 | | | | | | | |

DATE 08 OCT 75 AGARD-B - WEISS-HESS SOURCE DATA TABULATION

AR - WING FAR-FIELD VARIABLES, SEALED LEFT WING HOT RETURN

ALPHA = [illegible] BETA = [illegible]

| SECTION | LEFT WING BOTTOM | | | PERMANENT VARIABLE OR | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7990 | .8970 | .9720 | 1.0000 |
| X/CW | | | | | | | | | |
| .094 | .1087 | | | | | | | | |
| .150 | | | | -.0218 | -.0021 | .0153 | .0114 | | |
| .157 | | | | | | | | -.0011 | |
| .163 | | .1663 | | | | | | | |
| .177 | | | .0755 | | | | | | |
| .229 | .1047 | | | | | | | | |
| .246 | | .1385 | | | | | | | |
| .250 | | | | .0317 | -.0156 | .0068 | .0117 | | |
| .274 | | | .0110 | | | | | | |
| .345 | | | | | | | | .0120 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0363 | | | | | | | |
| .400 | | | | .0000 | .0150 | | .0074 | | |
| .409 | | | -.0207 | | | | | | |
| .418 | | | | | | | | | .0032 |
| .497 | .0005 | | | | | | | | |
| .503 | | | | | | | | -.0011 | |
| .557 | | | | .1358 | .0404 | | | | |
| .585 | | | .1894 | | | | | | |
| .600 | | | | | | | -.0175 | | |
| .637 | | .1874 | | | | | | | |
| .650 | | | | | | -.0096 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2083 | | | | |
| .730 | | | | -.3454 | | | | | |
| .750 | | | | | | | | | -.0617 |
| .760 | | | | | | -.0966 | -.1108 | | |
| .760 | | | .3876 | | | | | | |
| .795 | | | | .3984 | .2927 | | | | |
| .798 | | .3739 | | | | | | | |
| .809 | | | .4084 | | | | | | |
| .834 | -.0415 | | | | | | | | |
| .839 | | .2696 | | | | | | | |
| .860 | | | | .3430 | .3145 | -.0833 | | | |
| .887 | | | .2523 | | | | | | |
| .862 | | | | | | | | -.1289 | |
| .865 | .1313 | | | | | | | | |
| .879 | | .2065 | | | | | | | |
| .900 | .0926 | | | .2926 | | | -.1650 | | |
| .905 | | | .0949 | | | | | | |
| .919 | | .0544 | | | | | | | |
| .950 | | | | .0846 | .1129 | -.0348 | | | |
| .953 | | | .0201 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0953 | | | | | | | | |

AR097-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 4) = -.098 BETAO ( 1) = -6.268

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .8730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1120 | | -.1955 | | -.1468 | | |

ALPHAO( 4) = -.095 BETAO ( 2) = -4.207

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0326 | .0441 | .3510 | .7865 | .7414 | .7306 | .7424 | .0418 | |
| .010 | -.0700 | .0396 | .2742 | .1655 | .0809 | .1225 | .1979 | | |
| .020 | -.0753 | .0688 | .0003 | .0401 | .0388 | .0176 | .0111 | -.0019 | |
| .040 | | .0740 | .1238 | | | | | | |
| .050 | -.0304 | | | -.0136 | -.0007 | -.0218 | -.0242 | | |
| .069 | | | | | | | | -.0219 | |
| .080 | | | | -.0245 | | | | | |
| .081 | | | .0224 | | | | | | |
| .085 | | .0390 | | | | | | | |
| .094 | .0648 | | | | | | | | |
| .150 | | | | -.0472 | -.0366 | -.0180 | -.0249 | | |
| .157 | | | | | | | | -.0236 | |
| .163 | | .0817 | | | | | | | |
| .177 | | | .0237 | | | | | | |
| .229 | .0531 | | | | | | | | |
| .246 | | .0762 | | | | | | | |
| .250 | | | | -.0044 | -.0376 | -.0242 | -.0193 | | |
| .274 | | | -.0012 | | | | | | |
| .345 | | | | | | | | -.0111 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0180 | | | | | | | |
| .400 | | | | .0000 | -.0229 | | -.0190 | | |
| .402 | | | -.0453 | | | | | | |
| .418 | | | | | | | | | -.0225 |
| .497 | -.0438 | | | | | | | | |
| .503 | | | | | | | | -.0229 | |
| .550 | | | | .1297 | .0015 | | | | |
| .555 | | | .1527 | | | | | | |
| .600 | | | | | | | -.0380 | | |
| .637 | | .1581 | | | | | | | |
| .650 | | | | | | -.0433 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1908 | | | | |
| .725 | | | | -.4430 | | | | | |
| .730 | | | | | | | | | -.0828 |
| .750 | | | | | | -.0970 | -.1318 | | |

RETRO... BY ON THE

ARC97-019 IA81 EVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 4) = -.095 BETAO ( 2) = -4.207

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .3274 | | | | | | |
| .775 | | | | .3409 | .2506 | | | | |
| .798 | | .2753 | | | | | | | |
| .809 | | | .3610 | | | | | | |
| .834 | -.0713 | | | | | | | | |
| .839 | | .2037 | | | | | | | |
| .850 | | | | .2769 | .2493 | -.0567 | | | |
| .857 | | | .2094 | | | | | | |
| .862 | | | | | | | | -.1386 | |
| .855 | -.0163 | | | | | | | | |
| .879 | | .0882 | | | | | | | |
| .900 | .0367 | | | .1570 | | | -.1625 | | |
| .905 | | | .0522 | | | | | | |
| .919 | | .0497 | | | | | | | |
| .950 | | | | .0511 | .0808 | -.0092 | | | |
| .953 | | | -.0323 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .955 | -.0921 | | | | | | | | |
| 1.000 | | | -.1432 | | -.1847 | | -.1543 | | |

ALPHAO( 4) = -.084 BETAO ( 3) = .007

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0747 | -.0373 | .2241 | .6450 | .6272 | .6078 | .6236 | -.0333 | |
| .010 | -.0504 | -.0192 | .1560 | .1035 | .0280 | .0649 | .1255 | | |
| .020 | -.0432 | .0018 | .0000 | -.0034 | -.0111 | -.0284 | -.0379 | -.0632 | |
| .040 | | -.0027 | .1072 | | | | | | |
| .050 | -.0978 | | | -.0528 | -.0470 | -.0665 | -.0713 | | |
| .069 | | | | | | | | -.0783 | |
| .080 | | | | -.0672 | | | | | |
| .081 | | | -.0267 | | | | | | |
| .095 | | - 0354 | | | | | | | |
| .094 | -.0092 | | | | | | | | |
| .150 | | | | -.0930 | -.0845 | -.0598 | -.0722 | | |
| .157 | | | | | | | | -.0763 | |
| .163 | | .0385 | | | | | | | |
| .177 | | | -.0132 | | | | | | |
| .229 | -.0004 | | | | | | | | |
| .245 | | .0302 | | | | | | | |
| .250 | | | | -.0069 | -.0971 | -.0765 | -.0625 | | |
| .274 | | | -.0109 | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 4) = -.084 BETAO ( 3) = .007

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | 4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | -.0638 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0179 | | | | | | | |
| .400 | | | | .0000 | -.0200 | | -.0733 | | |
| .402 | | | .1140 | | | | | | |
| .418 | | | | | | | | | -.0805 |
| .497 | .0097 | | | | | | | | |
| .503 | | | | | | | | -.0701 | |
| .550 | | | | .1093 | .0585 | | | | |
| .565 | | | .0700 | | | | | | |
| .600 | | | | | | | -.0881 | | |
| .637 | | .0868 | | | | | | | |
| .650 | | | | | | -.0196 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1883 | | | | |
| .725 | | | | -.4354 | | | | | |
| .730 | | | | | | | | | -.1316 |
| .750 | | | | | | .0104 | -.1527 | | |
| .760 | | | .1583 | | | | | | |
| .775 | | | | .2838 | .2553 | | | | |
| .798 | | .0393 | | | | | | | |
| .808 | | | .2281 | | | | | | |
| .834 | -.1282 | | | | | | | | |
| .839 | | .0422 | | | | | | | |
| .850 | | | | .1929 | .1989 | .0356 | | | |
| .857 | | | .1049 | | | | | | |
| .862 | | | | | | | | -.1372 | |
| .865 | -.0720 | | | | | | | | |
| .879 | | .0402 | | | | | | | |
| .900 | -.0596 | | | .0833 | | | -.1550 | | |
| .905 | | | -.0167 | | | | | | |
| .919 | | -.0380 | | | | | | | |
| .950 | | | | -.0121 | .0194 | -.0272 | | | |
| .953 | | | -.0720 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0973 | | | | | | | | |
| 1.000 | | | -.1671 | | -.1595 | | -.1901 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 4) = -.062 BETAO ( 4) = 4.192

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .8720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1181 | -.0790 | .1481 | .5080 | .4667 | .4653 | .4978 | -.0804 | |
| .010 | -.1093 | -.0764 | .1469 | .0539 | -.0365 | -.0058 | .0544 | | |
| .020 | -.1096 | -.0796 | .0000 | -.0271 | -.0643 | -.0932 | -.0816 | -.0948 | |
| .040 | | -.0803 | .0682 | | | | | | |
| .050 | -.1263 | | | -.0383 | -.0863 | -.1173 | -.1104 | | |
| .069 | | | | | | | | -.1057 | |
| .080 | | | | -.0578 | | | | | |
| .081 | | | -.0163 | | | | | | |
| .086 | | - 0219 | | | | | | | |
| .094 | -.0700 | | | | | | | | |
| .150 | | | | -.0680 | -.0857 | -.0773 | -.0993 | | |
| .157 | | | | | | | | -.0929 | |
| .163 | | .0523 | | | | | | | |
| .177 | | | -.0400 | | | | | | |
| .229 | -.0511 | | | | | | | | |
| .246 | | -.0195 | | | | | | | |
| .250 | | | | -.0514 | -.0747 | -.0744 | -.0735 | | |
| .274 | | | .0012 | | | | | | |
| .345 | | | | | | | | .0669 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0355 | | | | | | | |
| .400 | | | | .0000 | .1236 | | -.0443 | | |
| .402 | | | .1534 | | | | | | |
| .418 | | | | | | | | | -.0869 |
| .497 | -.0249 | | | | | | | | |
| .503 | | | | | | | | -.0659 | |
| .550 | | | | .1761 | .1741 | | | | |
| .565 | | | .1625 | | | | | | |
| .600 | | | | | | | .0277 | | |
| .637 | | .1384 | | | | | | | |
| .650 | | | | | | .1268 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2126 | | | | |
| .725 | | | | -.3880 | | | | | |
| .730 | | | | | | | | | -.1298 |
| .750 | | | | | | .0564 | .0073 | | |
| .760 | | | -.0500 | | | | | | |
| .775 | | | | .1809 | .2569 | | | | |
| .798 | | -.0926 | | | | | | | |
| .808 | | | .0297 | | | | | | |
| .834 | -.1583 | | | | | | | | |
| .839 | | -.0522 | | | | | | | |
| .850 | | | | .0278 | .0738 | .0079 | | | |
| .857 | | | -.0409 | | | | | | |
| .862 | | | | | | | | -.0715 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 4) = -.062 BETAO ( 4) = 4.192

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.1057 | | | | | | | | |
| .879 | | -.0625 | | | | | | | |
| .900 | -.1103 | | | -.0630 | | | -.0163 | | |
| .905 | | | -.1051 | | | | | | |
| .919 | | -.1327 | | | | | | | |
| .950 | | | | -.1328 | -.1099 | -.0822 | | | |
| .953 | | | -.1821 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1202 | | | | | | | | |
| 1.000 | | | -.2019 | | -.1968 | | -.1825 | | |

ALPHAO( 4) = -.055 BETAO ( 5) = 8.267

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1075 | -.1189 | .0953 | .4476 | .4430 | .4271 | .4427 | -.0278 | |
| .010 | -.1111 | -.1189 | .1254 | .0223 | -.0630 | -.0195 | .0267 | | |
| .020 | -.1219 | -.0985 | .0000 | -.0538 | -.0945 | -.0995 | -.0998 | -.0413 | |
| .040 | | -.0875 | .0349 | | | | | | |
| .050 | -.1510 | | | -.0762 | -.1223 | -.1226 | -.1244 | | |
| .069 | | | | | | | | -.0531 | |
| .080 | | | | -.0935 | | | | | |
| .081 | | | -.0565 | | | | | | |
| .086 | | -.0589 | | | | | | | |
| .094 | -.1056 | | | | | | | | |
| .150 | | | | -.0730 | -.1155 | -.0933 | -.1080 | | |
| .157 | | | | | | | | -.0443 | |
| .163 | | .0002 | | | | | | | |
| .177 | | | -.0471 | | | | | | |
| .229 | -.0751 | | | | | | | | |
| .246 | | -.0258 | | | | | | | |
| .250 | | | | .0409 | -.0426 | -.0785 | -.0564 | | |
| .274 | | | .0670 | | | | | | |
| .345 | | | | | | | | -.0042 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0940 | | | | | | | |
| .400 | | | | .0000 | .1767 | | -.0285 | | |
| .402 | | | .1614 | | | | | | |
| .418 | | | | | | | | | -.0311 |
| .497 | .0054 | | | | | | | | |
| .503 | | | | | | | | .1099 | |
| .550 | | | | .1701 | .1796 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 4) = -.055 BETAO ( 5) = 6.267

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .1400 | | | | | | |
| .600 | | | | | | | .2286 | | |
| .637 | | .0836 | | | | | | | |
| .650 | | | | | | .1428 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1651 | | | | |
| .725 | | | | -.1978 | | | | | |
| .730 | | | | | | | | | -.0278 |
| .750 | | | | | | .0493 | .1382 | | |
| .760 | | | -.0811 | | | | | | |
| .775 | | | | .0988 | .1947 | | | | |
| .798 | | -.0870 | | | | | | | |
| .808 | | | .0008 | | | | | | |
| .834 | -.1036 | | | | | | | | |
| .839 | | -.0548 | | | | | | | |
| .850 | | | | -.0170 | .0193 | -.0431 | | | |
| .857 | | | -.0481 | | | | | | |
| .862 | | | | | | | | .0030 | |
| .865 | -.0846 | | | | | | | | |
| .879 | | -.1122 | | | | | | | |
| .900 | -.1229 | | | -.0864 | | | .0037 | | |
| .905 | | | -.1320 | | | | | | |
| .919 | | -.1550 | | | | | | | |
| .950 | | | | -.1444 | -.1444 | -.1149 | | | |
| .953 | | | -.1813 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0988 | | | | | | | | |
| 1.000 | | | -.1958 | | -.1981 | | -.1498 | | |

ALPHAO( 5) = 1.985 BETAO ( 1) = -6.257

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0445 | .0697 | .4194 | .8878 | .8208 | .8253 | .8278 | .1214 | |
| .010 | .0942 | .0616 | .3092 | .2315 | .1497 | .2108 | .3048 | | |
| .020 | .1336 | .0272 | .0000 | .0993 | .1244 | .1083 | .0988 | .0922 | |
| .040 | | .0240 | .1926 | | | | | | |
| .050 | .0759 | | | .0453 | .0750 | .0617 | .0713 | | |
| .069 | | | | | | | | .0639 | |
| .080 | | | | .0325 | | | | | |
| .081 | | | .0775 | | | | | | |
| .086 | | .0837 | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 5) = 1.986 BETAO ( 1) = -8.257

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | .0598 | | | | | | | | |
| .150 | | | | -.0123 | .0259 | .0520 | .0651 | | |
| .157 | | | | | | | | .0603 | |
| .163 | | .1684 | | | | | | | |
| .177 | | | .0748 | | | | | | |
| .229 | .0926 | | | | | | | | |
| .246 | | .1232 | | | | | | | |
| .250 | | | | .0395 | .0238 | .0543 | .0852 | | |
| .274 | | | -.0074 | | | | | | |
| .345 | | | | | | | | .0672 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0368 | | | | | | | |
| .400 | | | | .0000 | .0533 | | .0609 | | |
| .402 | | | .0036 | | | | | | |
| .418 | | | | | | | | | .0433 |
| .497 | .0018 | | | | | | | | |
| .503 | | | | | | | | .0442 | |
| .550 | | | | .1700 | .0341 | | | | |
| .565 | | | .2248 | | | | | | |
| .600 | | | | | | | .0258 | | |
| .637 | | .2206 | | | | | | | |
| .650 | | | | | | .0198 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2747 | | | | |
| .725 | | | | -.2593 | | | | | |
| .730 | | | | | | | | | -.0439 |
| .750 | | | | | | -.0698 | -.0844 | | |
| .760 | | | .3979 | | | | | | |
| .775 | | | | .4555 | .3585 | | | | |
| .798 | | .3774 | | | | | | | |
| .808 | | | .4114 | | | | | | |
| .834 | .0263 | | | | | | | | |
| .839 | | .2718 | | | | | | | |
| .850 | | | | .3591 | .3489 | .0065 | | | |
| .857 | | | .2558 | | | | | | |
| .862 | | | | | | | | -.1140 | |
| .865 | .1654 | | | | | | | | |
| .879 | | .1977 | | | | | | | |
| .900 | .1008 | | | .2153 | | | -.1577 | | |
| .905 | | | .0970 | | | | | | |
| .919 | | .0698 | | | | | | | |
| .950 | | | | .0912 | .1207 | -.0034 | | | |
| .953 | | | .0240 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .955 | -.0973 | | | | | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 5) = 1.985 BETAO ( 1) = -6.257

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1202 | | -.2066 | | -.1465 | | |

ALPHAO( 5) = 1.981 BETAO ( 2) = -2.089

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0324 | -.0062 | .3167 | .7332 | .6871 | .6913 | .7234 | .0627 | |
| .010 | .0418 | -.0078 | .2599 | .1617 | .0876 | .1454 | .2365 | | |
| .020 | .0569 | .0000 | .0000 | .0465 | .0617 | .0477 | .0480 | .0417 | |
| .040 | | .0298 | .0871 | | | | | | |
| .050 | .0686 | | | -.0092 | .0173 | .0111 | .0192 | | |
| .069 | | | | | | | | .0190 | |
| .080 | | | | -.0236 | | | | | |
| .081 | | | -.0092 | | | | | | |
| .086 | | .0152 | | | | | | | |
| .094 | -.0260 | | | | | | | | |
| .150 | | | | -.0511 | -.0277 | .0107 | .0185 | | |
| .157 | | | | | | | | .0157 | |
| .163 | | .0490 | | | | | | | |
| .177 | | | -.0017 | | | | | | |
| .229 | .0365 | | | | | | | | |
| .246 | | .0392 | | | | | | | |
| .250 | | | | -.0188 | -.0255 | .0025 | .0196 | | |
| .274 | | | .0009 | | | | | | |
| .345 | | | | | | | | .0196 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0399 | | | | | | | |
| .400 | | | | .0000 | -.0108 | | .0101 | | |
| .402 | | | .1179 | | | | | | |
| .418 | | | | | | | | | -.0064 |
| .497 | -.0515 | | | | | | | | |
| .503 | | | | | | | | .0016 | |
| .550 | | | | .1428 | .0352 | | | | |
| .565 | | | .1448 | | | | | | |
| .600 | | | | | | | -.0083 | | |
| .637 | | .1476 | | | | | | | |
| .650 | | | | | | -.0244 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2383 | | | | |
| .725 | | | | .0267 | | | | | |
| .730 | | | | | | | | | -.0816 |
| .750 | | | | | | -.0575 | -.1184 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 5) = 1.981 BETAO ( 2) = -2.089

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .2910 | | | | | | |
| .775 | | | | .3712 | .3093 | | | | |
| .798 | | .2409 | | | | | | | |
| .808 | | | .3105 | | | | | | |
| .834 | -.0457 | | | | | | | | |
| .839 | | .1881 | | | | | | | |
| .850 | | | | .2778 | .2630 | .0385 | | | |
| .857 | | | .1847 | | | | | | |
| .862 | | | | | | | | -.1357 | |
| .865 | .0113 | | | | | | | | |
| .879 | | .1065 | | | | | | | |
| .900 | .0090 | | | .1476 | | | -.1463 | | |
| .905 | | | .0495 | | | | | | |
| .919 | | .0301 | | | | | | | |
| .950 | | | | .0384 | .0692 | .0116 | | | |
| .953 | | | -.0241 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1055 | | | | | | | | |
| 1.000 | | | -.1577 | | -.2027 | | -.1723 | | |

ALPHAO( 5) = 1.994 BETAO ( 3) = 2.124

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0972 | -.0688 | .2236 | .5960 | .5939 | .5867 | .5972 | .0148 | |
| .010 | -.0494 | -.0555 | .2243 | .1111 | .0507 | .1026 | .1652 | | |
| .020 | -.0380 | -.0208 | .0000 | .0150 | .0261 | .0198 | .0090 | .0050 | |
| .040 | | -.0159 | .0738 | | | | | | |
| .050 | -.0825 | | | .0131 | -.0095 | -.0145 | -.0140 | | |
| .069 | | | | | | | | -.0114 | |
| .080 | | | | .0172 | | | | | |
| .081 | | | .0502 | | | | | | |
| .086 | | -.0201 | | | | | | | |
| .094 | -.0638 | | | | | | | | |
| .150 | | | | -.0395 | -.0240 | -.0136 | -.0087 | | |
| .157 | | | | | | | | -.0160 | |
| .163 | | .0779 | | | | | | | |
| .177 | | | -.0143 | | | | | | |
| .229 | -.0389 | | | | | | | | |
| .246 | | .0114 | | | | | | | |
| .250 | | | | -.0014 | -.0237 | -.0120 | -.0042 | | |
| .274 | | | -.0247 | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHA0( 5) = 1.994 BETA0 ( 3) = 2.124

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | -.0118 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0020 | | | | | | | |
| .400 | | | | .0000 | .0327 | | -.0055 | | |
| .402 | | | .1724 | | | | | | |
| .418 | | | | | | | | | -.0480 |
| .497 | -.0039 | | | | | | | | |
| .503 | | | | | | | | -.0259 | |
| .550 | | | | .2268 | .2041 | | | | |
| .565 | | | .2123 | | | | | | |
| .600 | | | | | | | .0020 | | |
| .637 | | .1990 | | | | | | | |
| .650 | | | | | | .1845 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2664 | | | | |
| .725 | | | | -.2308 | | | | | |
| .730 | | | | | | | | | -.1093 |
| .750 | | | | | | .1177 | -.0670 | | |
| .760 | | | .1046 | | | | | | |
| .775 | | | | .3092 | .3992 | | | | |
| .798 | | .0327 | | | | | | | |
| .808 | | | .1290 | | | | | | |
| .834 | -.1516 | | | | | | | | |
| .839 | | -.0090 | | | | | | | |
| .850 | | | | .1459 | .2063 | .0771 | | | |
| .857 | | | .0168 | | | | | | |
| .862 | | | | | | | | -.1054 | |
| .865 | -.0998 | | | | | | | | |
| .879 | | -.0685 | | | | | | | |
| .900 | -.0818 | | | .0290 | | | .0674 | | |
| .905 | | | -.0850 | | | | | | |
| .919 | | -.1028 | | | | | | | |
| .950 | | | | -.0655 | -.0331 | -.0150 | | | |
| .953 | | | -.1414 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1178 | | | | | | | | |
| 1.000 | | | -.1930 | | -.1837 | | -.1685 | | |

ARC97-019 IA81 LVAP(ALLML SEALED) LEFT WING BOT. (RETL36)

ALPHA0( 5) = 2.005 BETA0 ( 4) = 6.266

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1297 | -.1477 | .1112 | .4734 | .4781 | .4780 | .5135 | .0501 | |
| .010 | -.1288 | -.1337 | .1518 | .0659 | .0046 | .0720 | .1359 | | |
| .020 | -.1327 | -.0912 | .0000 | -.0074 | -.0022 | .0014 | -.0067 | .0465 | |
| .040 | | -.0798 | -.0449 | | | | | | |
| .050 | -.1498 | | | -.0362 | -.0304 | -.0237 | -.0267 | | |
| .069 | | | | | | | | .0324 | |
| .080 | | | | -.0499 | | | | | |
| .081 | | | -.0458 | | | | | | |
| .086 | | -.0506 | | | | | | | |
| .094 | -.1262 | | | | | | | | |
| .150 | | | | .0003 | -.0509 | -.0250 | -.0228 | | |
| .157 | | | | | | | | .0383 | |
| .163 | | .0166 | | | | | | | |
| .177 | | | .0167 | | | | | | |
| .229 | -.0604 | | | | | | | | |
| .248 | | .0060 | | | | | | | |
| .250 | | | | .1178 | .0885 | .0143 | .0321 | | |
| .274 | | | .1090 | | | | | | |
| .345 | | | | | | | | .0711 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1131 | | | | | | | |
| .400 | | | | .0000 | .2547 | | .0945 | | |
| .402 | | | .1865 | | | | | | |
| .418 | | | | | | | | | .0039 |
| .497 | .0700 | | | | | | | | |
| .503 | | | | | | | | .2153 | |
| .550 | | | | .1799 | .1854 | | | | |
| .565 | | | .1719 | | | | | | |
| .600 | | | | | | | .2422 | | |
| .637 | | .1458 | | | | | | | |
| .650 | | | | | | .1834 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1835 | | | | |
| .725 | | | | -.8062 | | | | | |
| .730 | | | | | | | | | -.1129 |
| .750 | | | | | | .0576 | .0928 | | |
| .760 | | | -.0585 | | | | | | |
| .775 | | | | .1159 | .2082 | | | | |
| .788 | | -.0711 | | | | | | | |
| .808 | | | .0132 | | | | | | |
| .834 | -.1918 | | | | | | | | |
| .839 | | -.0188 | | | | | | | |
| .850 | | | | -.0097 | .0364 | .0138 | | | |
| .857 | | | -.0383 | | | | | | |
| .862 | | | | | | | | -.0312 | |

ARC97-019 TAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 5) = 2.005 BETAO ( 4) = 6.268

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3340 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.0744 | | | | | | | | |
| .879 | | -.0934 | | | | | | | |
| .900 | -.1173 | | | -.0826 | | | .0097 | | |
| .905 | | | -.1239 | | | | | | |
| .919 | | -.1558 | | | | | | | |
| .950 | | | | -.1408 | -.1322 | -.0841 | | | |
| .953 | | | -.1763 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1097 | | | | | | | | |
| 1.000 | | | -.2019 | | -.1861 | | -.1597 | | |

ALPHAO( 8) = 4.105 BETAO ( 1) = -8.249

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0984 | .0897 | .4250 | .0895 | .0453 | .0513 | .0484 | .1772 | |
| .010 | .1126 | .0771 | .3423 | .2811 | .2212 | .3107 | .3737 | | |
| .020 | .0848 | .0014 | .0000 | .1577 | .2551 | .2187 | .1812 | .1723 | |
| .040 | | .1370 | .2190 | | | | | | |
| .050 | .0870 | | | .1050 | .1501 | .1498 | .1587 | | |
| .088 | | | | | | | | .1434 | |
| .080 | | | | .0885 | | | | | |
| .081 | | | .1002 | | | | | | |
| .086 | | .0872 | | | | | | | |
| .094 | .0587 | | | | | | | | |
| .150 | | | | .0299 | .0882 | .1224 | .1544 | | |
| .157 | | | | | | | | .1339 | |
| .163 | | .1762 | | | | | | | |
| .177 | | | .1047 | | | | | | |
| .229 | .1234 | | | | | | | | |
| .246 | | .1371 | | | | | | | |
| .250 | | | | .0778 | .0678 | .1126 | .1395 | | |
| .274 | | | .0167 | | | | | | |
| .345 | | | | | | | | .1182 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0831 | | | | | | | |
| .400 | | | | .0006 | .0788 | | .1118 | | |
| .402 | | | .0108 | | | | | | |
| .418 | | | | | | | | | .0443 |
| .497 | .0205 | | | | | | | | |
| .503 | | | | | | | | .0874 | |
| .550 | | | | .2548 | .0882 | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHA0( 6) = 4.105 BETA0 ( 1) = -6.249

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .2737 | | | | | | |
| .600 | | | | | | | .0713 | | |
| .637 | | .2667 | | | | | | | |
| .650 | | | | | | .0652 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3437 | | | | |
| .725 | | | | -.2469 | | | | | |
| .730 | | | | | | | | | -.0752 |
| .750 | | | | | | -.0146 | -.0546 | | |
| .760 | | | .3997 | | | | | | |
| .775 | | | | .5019 | .4327 | | | | |
| .798 | | .3345 | | | | | | | |
| .808 | | | .4288 | | | | | | |
| .834 | .0420 | | | | | | | | |
| .839 | | .2508 | | | | | | | |
| .850 | | | | .3539 | .3501 | .1044 | | | |
| .857 | | | .2546 | | | | | | |
| .852 | | | | | | | | -.1050 | |
| .865 | .1169 | | | | | | | | |
| .879 | | .1167 | | | | | | | |
| .900 | .0848 | | | .2022 | | | -.1139 | | |
| .905 | | | .0824 | | | | | | |
| .919 | | .0573 | | | | | | | |
| .950 | | | | .0757 | .1043 | .0583 | | | |
| .953 | | | -.0198 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0989 | | | | | | | | |
| 1.000 | | | -.1477 | | -.2301 | | -.1480 | | |

ALPHA0( 6) = 4.105 BETA0 ( 2) = -4.195

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0417 | .0205 | .3872 | .8145 | .7832 | .7848 | .7887 | .1560 | |
| .010 | .0569 | .0421 | .3607 | .2438 | .1778 | .2720 | .3444 | | |
| .020 | .0474 | .0877 | .0000 | .1234 | .1945 | .1858 | .1657 | .1537 | |
| .040 | | .0997 | .1575 | | | | | | |
| .050 | .0886 | | | .0698 | .1129 | .1238 | .1373 | | |
| .069 | | | | | | | | .1268 | |
| .080 | | | | .0519 | | | | | |
| .081 | | | .0522 | | | | | | |
| .086 | | .0586 | | | | | | | |

ARC97-019 TAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHA0( E) = 4.105 BETA0 ( 2) = -4.195

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| X/CW \ Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| .094 | .0035 | | | | | | | | |
| .150 | | | | .0129 | .0636 | .0991 | .1249 | | |
| .157 | | | | | | | | .1124 | |
| .163 | | .1162 | | | | | | | |
| .177 | | | .0518 | | | | | | |
| .229 | .0402 | | | | | | | | |
| .246 | | .0776 | | | | | | | |
| .250 | | | | .0455 | .0542 | .0857 | .1127 | | |
| .274 | | | -.0066 | | | | | | |
| .345 | | | | | | | | .0986 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0243 | | | | | | | |
| .400 | | | | .0009 | .0546 | | .0960 | | |
| .402 | | | -.0040 | | | | | | |
| .418 | | | | | | | | | .0244 |
| .497 | -.0194 | | | | | | | | |
| .503 | | | | | | | | .0698 | |
| .550 | | | | .2655 | .0556 | | | | |
| .595 | | | .2379 | | | | | | |
| .600 | | | | | | | .0560 | | |
| .637 | | .2772 | | | | | | | |
| .650 | | | | | | .0474 | | | |
| .670 | | | | | | | | .0006 | |
| .700 | .0000 | | | | .3344 | | | | |
| .725 | | | | -.4351 | | | | | |
| .730 | | | | | | | | | -.0907 |
| .750 | | | | | | .1023 | -.0704 | | |
| .760 | | | .3420 | | | | | | |
| .775 | | | | .4708 | .4188 | | | | |
| .799 | | .2652 | | | | | | | |
| .808 | | | .4022 | | | | | | |
| .834 | -.0243 | | | | | | | | |
| .839 | | .1737 | | | | | | | |
| .850 | | | | .3307 | .3152 | .1180 | | | |
| .857 | | | .2085 | | | | | | |
| .862 | | | | | | | | -.1155 | |
| .865 | .0457 | | | | | | | | |
| .879 | | .0540 | | | | | | | |
| .900 | -.0148 | | | .1807 | | | -.1107 | | |
| .905 | | | .0431 | | | | | | |
| .919 | | -.0463 | | | | | | | |
| .950 | | | | .0548 | .0863 | .0517 | | | |
| .953 | | | -.0506 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1047 | | | | | | | | |

ARC97-019 TA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 6) = 4.105 BETAO ( 2) = -4.195

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1737 | | -.2223 | | -.1684 | | |

ALPHAO( 6) = 4.105 BETAO ( 3) = .015

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0176 | -.0475 | .2786 | .6807 | .6760 | .6718 | .6844 | .0889 | |
| .010 | -.0127 | .0054 | .2729 | .1837 | .1303 | .2188 | .2818 | | |
| .020 | -.0245 | .0151 | .0000 | .0759 | .1484 | .1424 | .1175 | .0935 | |
| .040 | | .0073 | .0980 | | | | | | |
| .050 | .0102 | | | .0218 | .0659 | .0799 | .0939 | | |
| .059 | | | | | | | | .0712 | |
| .080 | | | | .0074 | | | | | |
| .091 | | | .0004 | | | | | | |
| .086 | | -.0134 | | | | | | | |
| .094 | -.0592 | | | | | | | | |
| .150 | | | | .0218 | .0260 | .0570 | .0818 | | |
| .157 | | | | | | | | .0627 | |
| .163 | | .0553 | | | | | | | |
| .177 | | | .0170 | | | | | | |
| .229 | .0040 | | | | | | | | |
| .246 | | .0389 | | | | | | | |
| .250 | | | | .0637 | .0338 | .0468 | .0732 | | |
| .274 | | | .0157 | | | | | | |
| .345 | | | | | | | | .0495 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0399 | | | | | | | |
| .400 | | | | .0000 | .0[illegible] | | .0515 | | |
| .402 | | | .2169 | | | | | | |
| .418 | | | | | | | | | -.0359 |
| .497 | .0439 | | | | | | | | |
| .503 | | | | | | | | .0278 | |
| .550 | | | | .2784 | .2522 | | | | |
| .565 | | | .2528 | | | | | | |
| .600 | | | | | | | .0433 | | |
| .637 | | .2246 | | | | | | | |
| .650 | | | | | | .2373 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3680 | | | | |
| .725 | | | | -.0816 | | | | | |
| .730 | | | | | | | | | -.1422 |
| .750 | | | | | | .1935 | -.0181 | | |

ARC97-019 !AB! LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 6) = 4.105 BETAO ( 3) = .015

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .1848 | | | | | | |
| .775 | | | | .3868 | .4321 | | | | |
| .798 | | .1262 | | | | | | | |
| .808 | | | .2123 | | | | | | |
| .834 | -.0916 | | | | | | | | |
| .839 | | .0532 | | | | | | | |
| .850 | | | | .2170 | .2461 | .1195 | | | |
| .857 | | | .0798 | | | | | | |
| .862 | | | | | | | | -.0995 | |
| .865 | -.0294 | | | | | | | | |
| .879 | | -.0384 | | | | | | | |
| .900 | -.0696 | | | .0882 | | | .1080 | | |
| .905 | | | -.0417 | | | | | | |
| .919 | | -.1014 | | | | | | | |
| .950 | | | | -.0189 | .0138 | .0177 | | | |
| .953 | | | -.1136 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1133 | | | | | | | | |
| 1.000 | | | -.1936 | | -.2064 | | -.1691 | | |

ALPHAO( 6) = 4.102 BETAO ( 4) = 4.191

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1102 | -.0933 | .1950 | .5786 | .5878 | .5917 | .5867 | .0448 | |
| .010 | -.0874 | -.0663 | .2319 | .1755 | .1697 | .2131 | .2486 | | |
| .020 | -.0894 | -.0294 | .2115 | .1237 | .1793 | .1435 | .1098 | .0621 | |
| .040 | | -.0140 | .1308 | | | | | | |
| .050 | -.1249 | | | .0521 | .0630 | .0765 | .0829 | | |
| .059 | | | | | | | | .0511 | |
| .090 | | | | .0156 | | | | | |
| .091 | | | .0410 | | | | | | |
| .086 | | .0140 | | | | | | | |
| .094 | -.0781 | | | | | | | | |
| .150 | | | | .0293 | .0381 | .0599 | .0819 | | |
| .157 | | | | | | | | .0458 | |
| .163 | | .0877 | | | | | | | |
| .177 | | | .0275 | | | | | | |
| .229 | -.0007 | | | | | | | | |
| .246 | | .0512 | | | | | | | |
| .250 | | | | .0961 | .0663 | .0679 | .0728 | | |
| .274 | | | .1009 | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 6) = 4.102 BETAO ( 4) = 4.191

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .0591 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1444 | | | | | | | |
| .400 | | | | .2794 | .2818 | | .1121 | | |
| .402 | | | .2566 | | | | | | |
| .418 | | | | | | | | | -.1016 |
| .497 | .1129 | | | | | | | | |
| .503 | | | | | | | | .0535 | |
| .550 | | | | .2299 | .2424 | | | | |
| .565 | | | .2207 | | | | | | |
| .600 | | | | | | | .2148 | | |
| .637 | | .2088 | | | | | | | |
| .650 | | | | | | .2288 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2883 | | | | |
| .725 | | | | .1706 | | | | | |
| .730 | | | | | | | | | -.2368 |
| .750 | | | | | | .1497 | .0828 | | |
| .760 | | | .0176 | | | | | | |
| .775 | | | | .2221 | .3299 | | | | |
| .798 | | -.0188 | | | | | | | |
| .808 | | | .0584 | | | | | | |
| .834 | -.1365 | | | | | | | | |
| .839 | | -.0434 | | | | | | | |
| .850 | | | | .0679 | .1237 | .0270 | | | |
| .857 | | | -.0466 | | | | | | |
| .852 | | | | | | | | -.0114 | |
| .865 | -.0827 | | | | | | | | |
| .879 | | -.0736 | | | | | | | |
| .900 | -.0983 | | | -.0352 | | | .0138 | | |
| .905 | | | -.1226 | | | | | | |
| .919 | | -.1334 | | | | | | | |
| .950 | | | | -.1149 | -.0868 | -.0718 | | | |
| .953 | | | -.1608 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .955 | -.1295 | | | | | | | | |
| 1.000 | | | -.2151 | | -.1974 | | -.1925 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 6) = 4.104 BETAO ( 5) = 8.248

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1326 | -.1725 | .1084 | .4930 | .5184 | .5405 | .5434 | .1145 | |
| .010 | -.1170 | -.1479 | .1748 | .1439 | .1609 | .1923 | .2218 | | |
| .020 | -.1187 | -.0899 | .1708 | .0907 | .1658 | .1242 | .0918 | .1378 | |
| .040 | | -.0698 | .0811 | | | | | | |
| .050 | -.1313 | | | .0251 | .0592 | .0658 | .0678 | | |
| .069 | | | | | | | | .1315 | |
| .080 | | | | .0164 | | | | | |
| .081 | | | .0008 | | | | | | |
| .086 | | -.0203 | | | | | | | |
| .094 | -.0746 | | | | | | | | |
| .150 | | | | .1063 | .1128 | .0982 | .1022 | | |
| .157 | | | | | | | | .1517 | |
| .163 | | .0305 | | | | | | | |
| .177 | | | .0893 | | | | | | |
| .229 | -.0481 | | | | | | | | |
| .246 | | .0587 | | | | | | | |
| .250 | | | | .1689 | .2024 | .1694 | .1348 | | |
| .274 | | | .1497 | | | | | | |
| .345 | | | | | | | | .2291 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1523 | | | | | | | |
| .400 | | | | .2254 | .2313 | | .2700 | | |
| .402 | | | .2388 | | | | | | |
| .418 | | | | | | | | | -.0745 |
| .497 | .1054 | | | | | | | | |
| .503 | | | | | | | | .1986 | |
| .550 | | | | .1968 | .2047 | | | | |
| .565 | | | .1969 | | | | | | |
| .600 | | | | | | | .2520 | | |
| .637 | | .1863 | | | | | | | |
| .650 | | | | | | .1996 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1758 | | | | |
| .725 | | | | .0764 | | | | | |
| .730 | | | | | | | | | -.2457 |
| .750 | | | | | | .0883 | .1019 | | |
| .760 | | | -.0474 | | | | | | |
| .775 | | | | .1176 | .2196 | | | | |
| .799 | | -.0745 | | | | | | | |
| .808 | | | .0011 | | | | | | |
| .834 | -.1270 | | | | | | | | |
| .839 | | -.0208 | | | | | | | |
| .850 | | | | -.0017 | .0450 | .0032 | | | |
| .857 | | | -.0471 | | | | | | |
| .862 | | | | | | | | -.0317 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL 36)

ALPHAO( 6) = 4.104 BETAO ( 5) = 6.248

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.0736 | | | | | | | | |
| .879 | | -.0866 | | | | | | | |
| .900 | -.1091 | | | -.0831 | | | .0096 | | |
| .905 | | | -.1212 | | | | | | |
| .919 | | -.1488 | | | | | | | |
| .950 | | | | -.1443 | -.1299 | -.0803 | | | |
| .953 | | | -.1730 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1227 | | | | | | | | |
| 1.000 | | | -.2156 | | -.1961 | | -.1757 | | |

ALPHAO( 7) = 6.207 BETAO ( 1) = -4.161

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0277 | .0304 | .4126 | .8529 | .8408 | .8319 | .8402 | .2001 | |
| .010 | .0447 | .0695 | .4237 | .3030 | .2949 | .3951 | .4614 | | |
| .020 | .0275 | .1017 | .3760 | .1870 | .3149 | .3036 | .2916 | .2233 | |
| .040 | | .0955 | .2147 | | | | | | |
| .050 | .0225 | | | .1505 | .1702 | .2120 | .2494 | | |
| .069 | | | | | | | | .2001 | |
| .080 | | | | .0861 | | | | | |
| .081 | | | .0804 | | | | | | |
| .086 | | .0725 | | | | | | | |
| .094 | .0275 | | | | | | | | |
| .150 | | | | .0461 | .1152 | .2067 | .2272 | | |
| .157 | | | | | | | | .1825 | |
| .163 | | .1527 | | | | | | | |
| .177 | | | .0955 | | | | | | |
| .229 | .0613 | | | | | | | | |
| .246 | | .1101 | | | | | | | |
| .250 | | | | .0974 | .1192 | .1662 | .1958 | | |
| .274 | | | .0236 | | | | | | |
| .345 | | | | | | | | .1579 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0570 | | | | | | | |
| .400 | | | | .1344 | .1295 | | .1678 | | |
| .402 | | | .1399 | | | | | | |
| .418 | | | | | | | | | -.0126 |
| .497 | .0066 | | | | | | | | |
| .503 | | | | | | | | .1283 | |
| .550 | | | | .4203 | .4048 | | | | |

AR(97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 7) = 6.207 BETAO ( 1) = -4.161

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .4516 | | | | | | |
| .600 | | | | | | | .1253 | | |
| .637 | | .4918 | | | | | | | |
| .650 | | | | | | .3789 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .4191 | | | | |
| .725 | | | | .3876 | | | | | |
| .730 | | | | | | | | | -.1728 |
| .750 | | | | | | .2763 | .0502 | | |
| .760 | | | .2682 | | | | | | |
| .775 | | | | .4996 | .4956 | | | | |
| .798 | | .2408 | | | | | | | |
| .808 | | | .3188 | | | | | | |
| .834 | .0162 | | | | | | | | |
| .839 | | .1442 | | | | | | | |
| .850 | | | | .2998 | .2893 | .1476 | | | |
| .857 | | | .1652 | | | | | | |
| .862 | | | | | | | | -.0754 | |
| .865 | .0729 | | | | | | | | |
| .879 | | .0210 | | | | | | | |
| .900 | -.0355 | | | .1542 | | | .1293 | | |
| .905 | | | .0217 | | | | | | |
| .919 | | -.0721 | | | | | | | |
| .950 | | | | .0311 | .0626 | .0385 | | | |
| .953 | | | -.0621 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1279 | | | | | | | | |
| 1.000 | | | -.1875 | | -.2466 | | -.1593 | | |

ALPHAO( 7) = 6.210 BETAO ( 2) = -2.065

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0143 | -.0080 | .3503 | .7869 | .8005 | .7993 | .7895 | .1669 | |
| .010 | .0137 | .0321 | .3520 | .2754 | .2979 | .3668 | .4168 | | |
| .020 | .0286 | .0406 | .3067 | .1683 | .3100 | .2754 | .2581 | .1918 | |
| .040 | | .0442 | .1584 | | | | | | |
| .050 | .0429 | | | .1124 | .1562 | .1825 | .2187 | | |
| .059 | | | | | | | | .1705 | |
| .080 | | | | .0741 | | | | | |
| .091 | | | .0580 | | | | | | |
| .096 | | .0821 | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHA0( 7) = 6.210 BETA0 ( 2) = -2.065

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0330 | | | | | | | | |
| .150 | | | | .0534 | .1009 | .1726 | .2008 | | |
| .157 | | | | | | | | .1506 | |
| .163 | | .0890 | | | | | | | |
| .177 | | | .0518 | | | | | | |
| .229 | .0399 | | | | | | | | |
| .246 | | .0563 | | | | | | | |
| .250 | | | | .0780 | .1042 | .1474 | .1745 | | |
| .274 | | | .0813 | | | | | | |
| .345 | | | | | | | | .1319 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0570 | | | | | | | |
| .400 | | | | .0978 | .1186 | | .1486 | | |
| .402 | | | .1227 | | | | | | |
| .418 | | | | | | | | | -.0471 |
| .497 | .0558 | | | | | | | | |
| .503 | | | | | | | | .1037 | |
| .550 | | | | .4685 | .4278 | | | | |
| .555 | | | .4807 | | | | | | |
| .600 | | | | | | | .1107 | | |
| .637 | | .4866 | | | | | | | |
| .650 | | | | | | .4630 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .4242 | | | | |
| .725 | | | | .3519 | | | | | |
| .730 | | | | | | | | | -.2028 |
| .750 | | | | | | .2515 | .1403 | | |
| .760 | | | .2168 | | | | | | |
| .775 | | | | .4714 | .4965 | | | | |
| .798 | | .1855 | | | | | | | |
| .808 | | | .2722 | | | | | | |
| .834 | -.0489 | | | | | | | | |
| .839 | | 334 | | | | | | | |
| .850 | | | | .2714 | .2793 | .1318 | | | |
| .857 | | | .1200 | | | | | | |
| .862 | | | | | | | | -.0398 | |
| .865 | .0068 | | | | | | | | |
| .879 | | -.0217 | | | | | | | |
| .900 | -.0456 | | | .1333 | | | .0941 | | |
| .905 | | | -.0128 | | | | | | |
| .919 | | -.0987 | | | | | | | |
| .950 | | | | .0142 | .0432 | .0218 | | | |
| .953 | | | -.0912 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1363 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 7) = 6.210 BETAO ( 2) = -2.065

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1985 | | -.2441 | | -.1712 | | |

ALPHAO( 7) = 6.220 BETAO ( 3) = .028

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0508 | -.0332 | .3064 | .7483 | .7466 | .7541 | .7350 | .1355 | |
| .010 | -.0407 | .0207 | .3172 | .2567 | .2947 | .3613 | .3998 | | |
| .020 | -.0251 | .0257 | .2723 | .1556 | .3012 | .2726 | .2517 | .1653 | |
| .040 | | .0253 | .1423 | | | | | | |
| .050 | .0220 | | | .1183 | .1520 | .1816 | .2113 | | |
| .069 | | | | | | | | .1511 | |
| .080 | | | | .1115 | | | | | |
| .081 | | | .1315 | | | | | | |
| .086 | | .0421 | | | | | | | |
| .094 | -.0689 | | | | | | | | |
| .150 | | | | .1270 | .1370 | .1793 | .1984 | | |
| .157 | | | | | | | | .1382 | |
| .163 | | .0898 | | | | | | | |
| .177 | | | .1092 | | | | | | |
| .229 | .0011 | | | | | | | | |
| .246 | | .0871 | | | | | | | |
| .250 | | | | .0917 | .1481 | .1697 | .1750 | | |
| .274 | | | .0594 | | | | | | |
| .345 | | | | | | | | .1226 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1319 | | | | | | | |
| .400 | | | | .3567 | .2357 | | .1670 | | |
| .402 | | | .3474 | | | | | | |
| .418 | | | | | | | | | -.0877 |
| .497 | .1328 | | | | | | | | |
| .503 | | | | | | | | .1093 | |
| .550 | | | | .3787 | .3868 | | | | |
| .565 | | | .3613 | | | | | | |
| .600 | | | | | | | .2054 | | |
| .637 | | .3393 | | | | | | | |
| .650 | | | | | | .3908 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3681 | | | | |
| .725 | | | | .2923 | | | | | |
| .730 | | | | | | | | | -.2445 |
| .750 | | | | | | .2285 | .1915 | | |

ARC97-019 IA81 LVAP(ALLML SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 7) = 6.220 BETAO ( 3) = .028

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2980 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .1603 | | | | | | |
| .775 | | | | .3858 | .4588 | | | | |
| .798 | | .1201 | | | | | | | |
| .808 | | | .1957 | | | | | | |
| .834 | -.0619 | | | | | | | | |
| .839 | | .0415 | | | | | | | |
| .850 | | | | .2108 | .2370 | .0992 | | | |
| .857 | | | .0568 | | | | | | |
| .862 | | | | | | | | .0522 | |
| .865 | -.0082 | | | | | | | | |
| .879 | | -.0544 | | | | | | | |
| .900 | -.0901 | | | .0808 | | | .0699 | | |
| .905 | | | -.0565 | | | | | | |
| .919 | | -.1244 | | | | | | | |
| .950 | | | | -.0240 | .0087 | -.0115 | | | |
| .953 | | | -.1223 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .955 | -.1357 | | | | | | | | |
| 1.000 | | | -.2082 | | -.2377 | | -.1783 | | |

ALPHAO( 7) = 6.219 BETAO ( 4) = 2.132

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0666 | -.0631 | .2743 | .6810 | .6923 | .6911 | .6702 | .0972 | |
| .010 | -.0518 | .0072 | .3129 | .2988 | .3355 | .3538 | .3818 | | |
| .020 | -.0591 | .0329 | .2970 | .2537 | .3146 | .2725 | .2506 | .1377 | |
| .040 | | .0263 | .2457 | | | | | | |
| .050 | -.0366 | | | .1515 | .1770 | .1925 | .2073 | | |
| .069 | | | | | | | | .1297 | |
| .080 | | | | .1207 | | | | | |
| .081 | | | .1126 | | | | | | |
| .086 | | .0582 | | | | | | | |
| .094 | -.0538 | | | | | | | | |
| .150 | | | | .0747 | .1260 | .1728 | .1887 | | |
| .157 | | | | | | | | .1237 | |
| .163 | | .2005 | | | | | | | |
| .177 | | | .0474 | | | | | | |
| .229 | .0451 | | | | | | | | |
| .246 | | .0027 | | | | | | | |
| .250 | | | | .1136 | .1240 | .1593 | .1698 | | |
| .274 | | | .0503 | | | | | | |

ARC97-019 IA81 LV P(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHAO( 7) = 6.219 BETAO ( 4) = 2.132

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .1469 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .2045 | | | | | | | |
| .400 | | | | .3668 | .3691 | | .2123 | | |
| .402 | | | .3617 | | | | | | |
| .418 | | | | | | | | | -.1395 |
| .497 | .1080 | | | | | | | | |
| .503 | | | | | | | | .1546 | |
| .550 | | | | .3137 | .3286 | | | | |
| .555 | | | .2952 | | | | | | |
| .600 | | | | | | | .2976 | | |
| .637 | | .2809 | | | | | | | |
| .650 | | | | | | .3102 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2589 | | | | |
| .725 | | | | .2109 | | | | | |
| .730 | | | | | | | | | -.2968 |
| .750 | | | | | | .1464 | .1284 | | |
| .760 | | | .0831 | | | | | | |
| .775 | | | | .2712 | .3490 | | | | |
| .799 | | .0555 | | | | | | | |
| .808 | | | .1257 | | | | | | |
| .834 | -.1091 | | | | | | | | |
| .839 | | -.0130 | | | | | | | |
| .850 | | | | .1253 | .1733 | .0676 | | | |
| .857 | | | -.0045 | | | | | | |
| .862 | | | | | | | | .0068 | |
| .865 | -.0634 | | | | | | | | |
| .879 | | -.0991 | | | | | | | |
| .900 | -.1184 | | | .0168 | | | .0358 | | |
| .905 | | | -.1054 | | | | | | |
| .919 | | -.1597 | | | | | | | |
| .950 | | | | -.0872 | -.0351 | -.0443 | | | |
| .953 | | | -.1841 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .955 | -.1390 | | | | | | | | |
| 1.000 | | | -.2238 | | -.2047 | | -.1931 | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL36)

ALPHA0( 7) = 9.217 BETA0 ( 5) = 4.196

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BM | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CH | | | | | | | | | |
| .000 | -.1411 | -.0859 | .2231 | .6093 | .6345 | .6343 | .6190 | .0742 | |
| .010 | -.1034 | -.0623 | .3081 | .2424 | .2967 | .3283 | .3587 | | |
| .020 | -.0849 | -.0386 | .2946 | .1802 | .2856 | .2505 | .2404 | .1286 | |
| .040 | | -.0314 | .1388 | | | | | | |
| .050 | -.1106 | | | .0970 | .1468 | .1750 | .2057 | | |
| .069 | | | | | | | | .1445 | |
| .080 | | | | .0746 | | | | | |
| .081 | | | .0265 | | | | | | |
| .086 | | .0695 | | | | | | | |
| .094 | -.0581 | | | | | | | | |
| .150 | | | | .1028 | .1363 | .2272 | .2278 | | |
| .157 | | | | | | | | .1554 | |
| .163 | | .1230 | | | | | | | |
| .177 | | | .0661 | | | | | | |
| .229 | -.0012 | | | | | | | | |
| .246 | | .0673 | | | | | | | |
| .250 | | | | .3004 | .3166 | .2031 | .2562 | | |
| .274 | | | .2514 | | | | | | |
| .345 | | | | | | | | .1806 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .2388 | | | | | | | |
| .400 | | | | .2641 | .2726 | | .2748 | | |
| .402 | | | .2691 | | | | | | |
| .418 | | | | | | | | | -.2239 |
| .497 | .1684 | | | | | | | | |
| .503 | | | | | | | | .1614 | |
| .550 | | | | .2347 | .2687 | | | | |
| .565 | | | .2285 | | | | | | |
| .600 | | | | | | | .2270 | | |
| .637 | | .2221 | | | | | | | |
| .650 | | | | | | .3006 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2534 | | | | |
| .725 | | | | .1559 | | | | | |
| .730 | | | | | | | | | -.3052 |
| .750 | | | | | | .1263 | .1282 | | |
| .760 | | | .0239 | | | | | | |
| .775 | | | | .1906 | .3017 | | | | |
| .798 | | -.0063 | | | | | | | |
| .808 | | | .0641 | | | | | | |
| .834 | -.1153 | | | | | | | | |
| .839 | | -.0347 | | | | | | | |
| .850 | | | | .0599 | .1028 | .0270 | | | |
| .857 | | | -.0428 | | | | | | |
| .862 | | | | | | | | -.0131 | |

ARC97-019 1A81 LVAP(ALL-ML SEALED) LEFT WING BOT. (RETL36)

ALPHA0( 7) = 6.217 BETA0 ( 5) = 4.196

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.0617 | | | | | | | | |
| .879 | | -.0759 | | | | | | | |
| .900 | -.1063 | | | -.0387 | | | .0046 | | |
| .905 | | | -.1205 | | | | | | |
| .919 | | -.1376 | | | | | | | |
| .950 | | | | -.1145 | -.0887 | -.0719 | | | |
| .953 | | | -.1611 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1355 | | | | | | | | |
| 1.000 | | | -.2237 | | -.2044 | | -.2036 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.200 RN/FT = 2.500
ELV-IB = 8.000 ELV-OB = -4.000
RUDDER = .000 [illegible] = .000

ALPHAO( I) = -6.357 BETAO ( I) = -4.340

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BM | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CM | | | | | | | | | |
| .000 | .0458 | .1184 | .3617 | .8151 | .7520 | .7189 | .7412 | -.0611 | |
| .010 | -.0084 | .0829 | .2142 | .1345 | .0465 | .0936 | .1269 | | |
| .020 | -.0357 | .0647 | .1555 | .0143 | -.0074 | -.0373 | -.0382 | -.1171 | |
| .040 | | .0981 | .0849 | | | | | | |
| .050 | .0138 | | | -.0414 | -.0484 | -.0784 | -.0771 | | |
| .069 | | | | | | | | -.1222 | |
| .080 | | | | -.0531 | | | | | |
| .081 | | | .0559 | | | | | | |
| .086 | | .0978 | | | | | | | |
| .094 | -.0012 | | | | | | | | |
| .150 | | | | -.0605 | -.0703 | -.0375 | -.0832 | | |
| .157 | | | | | | | | -.1168 | |
| .163 | | .1528 | | | | | | | |
| .177 | | | .0171 | | | | | | |
| .229 | .1497 | | | | | | | | |
| .246 | | .0525 | | | | | | | |
| .250 | | | | -.0124 | -.0757 | -.0709 | -.0672 | | |
| .274 | | | -.0291 | | | | | | |
| .345 | | | | | | | | -.0771 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0246 | | | | | | | |
| .400 | | | | -.0037 | -.0473 | | -.0816 | | |
| .402 | | | -.0268 | | | | | | |
| .418 | | | | | | | | | -.1376 |
| .497 | .0138 | | | | | | | | |
| .503 | | | | | | | | -.0744 | |
| .550 | | | | .0748 | -.0460 | | | | |
| .565 | | | .1133 | | | | | | |
| .600 | | | | | | | -.0887 | | |
| .637 | | .1237 | | | | | | | |
| .650 | | | | | | -.0808 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0066 | | | | |
| .725 | | | | .1493 | | | | | |
| .730 | | | | | | | | | -.1819 |
| .750 | | | | | | -.1405 | -.1520 | | |
| .760 | | | .0903 | | | | | | |
| .775 | | | | .2281 | .1724 | | | | |

ARC97-019 1.8( LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 1) = -6.357 BETAO ( 1) = -.340

SECTION ( 1)LEFT WING BOTTO( DEPENDENT VARIABLE CP

| X/CW | Y/BW .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| .798 | | .0927 | | | | | | | |
| .808 | | | .3100 | | | | | | |
| .834 | -.0258 | | | | | | | | |
| .839 | | .0721 | | | | | | | |
| .850 | | | | .2374 | .1657 | -.1193 | | | |
| .857 | | | .2374 | | | | | | |
| .862 | | | | | | | | -.1355 | |
| .865 | .0213 | | | | | | | | |
| .879 | | .1412 | | | | | | | |
| .900 | -.0585 | | | .1539 | | | -.1632 | | |
| .905 | | | .1015 | | | | | | |
| .919 | | .0913 | | | | | | | |
| .950 | | | | .0664 | .0976 | -.1105 | | | |
| .953 | | | .0343 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0436 | | | | | | | | |
| 1.000 | | | -.0986 | | -.1061 | | -.1581 | | |

ALPHAO( 1) = -6.346 BETAO ( 2) = -2.232

SECTION ( 1)LEFT WING B OM DEPENDENT VARIABLE CP

| X/CW | Y/BW .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| .000 | .0298 | .0825 | .3395 | .6994 | .6669 | .6379 | .6485 | -.0948 | |
| .010 | -.0134 | .0536 | .1873 | .1015 | .0229 | .0572 | .0776 | | |
| .020 | -.0312 | .0404 | .1218 | -.0034 | -.0265 | -.0681 | -.0898 | -.1424 | |
| .040 | | .0647 | .0755 | | | | | | |
| .050 | .0198 | | | -.0535 | -.0677 | -.1081 | -.1085 | | |
| .068 | | | | | | | | -.1482 | |
| .080 | | | | -.0582 | | | | | |
| .081 | | | 0096 | | | | | | |
| .086 | | .0806 | | | | | | | |
| .094 | .0174 | | | | | | | | |
| .150 | | | | -.0789 | -.0928 | -.0563 | -.1139 | | |
| .157 | | | | | | | | -.1421 | |
| .163 | | .0981 | | | | | | | |
| .177 | | | -.0444 | | | | | | |
| .229 | .1066 | | | | | | | | |
| .248 | | .0163 | | | | | | | |
| .250 | | | | -.0378 | -.1007 | -.0942 | -.0905 | | |
| .274 | | | -.0245 | | | | | | |
| .345 | | | | | | | | -.1052 | |
| .362 | .0000 | | | | | | | | |

ARC97-019 TAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHA0( 1) = -6.346 BETA0 ( 2) = -2.232

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .390 | | .0001 | | | | | | | |
| .400 | | | | -.0328 | -.0944 | | -.1066 | | |
| .402 | | | .0312 | | | | | | |
| .418 | | | | | | | | | -.1625 |
| .497 | -.0138 | | | | | | | | |
| .503 | | | | | | | | -.1018 | |
| .550 | | | | .0517 | -.0423 | | | | |
| .565 | | | .0539 | | | | | | |
| .600 | | | | | | | -.1127 | | |
| .637 | | .0712 | | | | | | | |
| .650 | | | | | | -.1102 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0428 | | | | |
| .725 | | | | .0674 | | | | | |
| .730 | | | | | | | | | -.2025 |
| .750 | | | | | | -.1361 | -.1698 | | |
| .760 | | | .0468 | | | | | | |
| .775 | | | | .1516 | .1330 | | | | |
| .798 | | .0487 | | | | | | | |
| .808 | | | .1390 | | | | | | |
| .834 | -.0555 | | | | | | | | |
| .839 | | .0500 | | | | | | | |
| .850 | | | | .1832 | .1123 | -.0976 | | | |
| .857 | | | .1893 | | | | | | |
| .862 | | | | | | | | -.1318 | |
| .865 | -.0107 | | | | | | | | |
| .879 | | -.0083 | | | | | | | |
| .900 | -.0921 | | | .1132 | | | -.1746 | | |
| .905 | | | .0664 | | | | | | |
| .919 | | .0439 | | | | | | | |
| .950 | | | | .0354 | .0385 | -.1082 | | | |
| .953 | | | -.0049 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0254 | | | | | | | | |
| 1.000 | | | -.1184 | | -.1081 | | -.1530 | | |

ARC97-019 !A81 LVAP(ALL%L SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 1) = -6.330 BETAO ( 3) = -.129

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | 0292 | .0511 | .2818 | .6420 | .5990 | .5555 | .5666 | -.1235 | |
| .010 | .0017 | .0390 | .1639 | .0361 | -.0079 | .0198 | .0356 | | |
| .020 | .0031 | .0508 | .1035 | -.0583 | -.0553 | -.0966 | -.0968 | -.1661 | |
| .040 | | .0518 | .0536 | | | | | | |
| .050 | -.0058 | | | -.0849 | -.0973 | -.1340 | -.1332 | | |
| .059 | | | | | | | | -.1702 | |
| .080 | | | | -.0809 | | | | | |
| .081 | | | -.0142 | | | | | | |
| .085 | | .0282 | | | | | | | |
| .094 | .0038 | | | | | | | | |
| .150 | | | | -.0933 | -.1185 | -.0774 | -.1401 | | |
| .157 | | | | | | | | -.1689 | |
| .183 | | .0673 | | | | | | | |
| .177 | | | -.0142 | | | | | | |
| .229 | .0525 | | | | | | | | |
| .246 | | .0346 | | | | | | | |
| .250 | | | | -.0489 | -.1286 | -.1213 | -.1108 | | |
| .274 | | | -.0108 | | | | | | |
| .345 | | | | | | | | -.1279 | |
| .352 | .0000 | | | | | | | | |
| .380 | | -.0246 | | | | | | | |
| .400 | | | | .0458 | -.1026 | | -.1330 | | |
| .402 | | | .1052 | | | | | | |
| .418 | | | | | | | | | -.1868 |
| .492 | -.0249 | | | | | | | | |
| .503 | | | | | | | | -.1221 | |
| .550 | | | | .0134 | -.0152 | | | | |
| .565 | | | .0199 | | | | | | |
| .600 | | | | | | | -.1378 | | |
| .637 | | .0508 | | | | | | | |
| .650 | | | | | | -.0948 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0318 | | | | |
| .725 | | | | .0364 | | | | | |
| .730 | | | | | | | | | -.2223 |
| .750 | | | | | | -.0907 | -.1863 | | |
| .760 | | | -.0071 | | | | | | |
| .775 | | | | .1245 | .1039 | | | | |
| .798 | | -.0068 | | | | | | | |
| .808 | | | .1025 | | | | | | |
| .834 | -.1063 | | | | | | | | |
| .839 | | -.0269 | | | | | | | |
| .850 | | | | .1417 | .0832 | -.0921 | | | |
| .857 | | | .0954 | | | | | | |
| .862 | | | | | | | | -.1326 | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 1) = -6.330 BETAO ( 3) = -.129

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.0804 | | | | | | | | |
| .879 | | -.0686 | | | | | | | |
| .900 | -.1223 | | | .0678 | | | -.1798 | | |
| .905 | | | .0007 | | | | | | |
| .919 | | .0017 | | | | | | | |
| .950 | | | | -.0025 | .0052 | -.1145 | | | |
| .953 | | | -.0459 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0436 | | | | | | | | |
| 1.000 | | | -.1346 | | -.1013 | | -.1457 | | |

ALPHAO( 1) = -6.316 BETAO ( 4) = 1.982

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0023 | .0088 | .2247 | .5954 | .4553 | .4539 | .5006 | -.1537 | |
| .010 | .0073 | .0224 | .1571 | .0329 | -.0695 | -.0020 | -.0023 | | |
| .020 | .0137 | .0183 | .1284 | -.0653 | -.0982 | -.1005 | -.1225 | -.1903 | |
| .040 | | .0132 | .0307 | | | | | | |
| .050 | -.0303 | | | -.1168 | -.1258 | -.1336 | -.1593 | | |
| .069 | | | | | | | | -.1964 | |
| .080 | | | | -.1298 | | | | | |
| .081 | | | -.0399 | | | | | | |
| .086 | | -.0020 | | | | | | | |
| .094 | -.0136 | | | | | | | | |
| .150 | | | | -.1024 | -.1390 | -.0980 | -.1645 | | |
| .157 | | | | | | | | -.1974 | |
| .163 | | .0230 | | | | | | | |
| .177 | | | -.0399 | | | | | | |
| .229 | .0158 | | | | | | | | |
| .246 | | .0076 | | | | | | | |
| .250 | | | | -.0720 | -.1373 | -.1505 | -.1287 | | |
| .274 | | | -.0427 | | | | | | |
| .345 | | | | | | | | -.1633 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0028 | | | | | | | |
| .400 | | | | .0546 | -.0815 | | -.1571 | | |
| .402 | | | .0912 | | | | | | |
| .418 | | | | | | | | | -.2103 |
| .497 | .0195 | | | | | | | | |
| .503 | | | | | | | | -.1472 | |
| .550 | | | | .0128 | -.0083 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 1) = -6.316 BETAO ( 4) = 1.982

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .0239 | | | | | | |
| .600 | | | | | | | -.1619 | | |
| .637 | | .0461 | | | | | | | |
| .650 | | | | | | -.0626 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0268 | | | | |
| .725 | | | | -.0213 | | | | | |
| .730 | | | | | | | | | -.2380 |
| .750 | | | | | | -.0684 | -.1749 | | |
| .760 | | | -.0298 | | | | | | |
| .775 | | | | .1157 | .0889 | | | | |
| .798 | | -.0666 | | | | | | | |
| .808 | | | .0016 | | | | | | |
| .834 | -.1501 | | | | | | | | |
| .839 | | -.1014 | | | | | | | |
| .850 | | | | .1217 | .0749 | -.0738 | | | |
| .857 | | | -.0295 | | | | | | |
| .862 | | | | | | | | -.1389 | |
| .865 | -.1382 | | | | | | | | |
| .879 | | -.1331 | | | | | | | |
| .900 | -.1269 | | | .0249 | | | -.1646 | | |
| .905 | | | -.0758 | | | | | | |
| .919 | | -.0994 | | | | | | | |
| .950 | | | | -.0567 | -.0183 | -.1055 | | | |
| .953 | | | -.1059 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0833 | | | | | | | | |
| 1.000 | | | -.1539 | | -.1139 | | -.1328 | | |

ALPHAO( 1) = -6.303 BETAO ( 5) = 4.052

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0057 | -.0210 | .1861 | .5006 | .4358 | .3618 | .3797 | -.1769 | |
| .010 | .0004 | -.0115 | .1377 | -.0058 | -.1009 | -.0581 | -.0517 | | |
| .020 | -.0098 | -.0173 | .1090 | -.0870 | -.1340 | -.1523 | -.1512 | -.2077 | |
| .040 | | -.0186 | .0167 | | | | | | |
| .050 | -.0518 | | | -.1154 | -.1630 | -.1824 | -.1815 | | |
| .069 | | | | | | | | -.2152 | |
| .080 | | | | -.0993 | | | | | |
| .081 | | | .0068 | | | | | | |
| .086 | | .0006 | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 1) = -6.303 BETAO ( 5) = 4.052

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .8730 | .7800 | .8870 | .8720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0105 | | | | | | | | |
| .150 | | | | -.0880 | -.1680 | -.1184 | -.1784 | | |
| .157 | | | | | | | | -.2183 | |
| .163 | | .0327 | | | | | | | |
| .177 | | | -.0371 | | | | | | |
| .229 | -.0129 | | | | | | | | |
| .246 | | .0018 | | | | | | | |
| .250 | | | | -.0628 | -.1308 | -.1600 | -.1382 | | |
| .274 | | | -.0456 | | | | | | |
| .345 | | | | | | | | -.2001 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0237 | | | | | | | |
| .400 | | | | .0333 | -.0160 | | -.1711 | | |
| .402 | | | .0826 | | | | | | |
| .418 | | | | | | | | | -.2274 |
| .497 | .0076 | | | | | | | | |
| .503 | | | | | | | | -.1668 | |
| .550 | | | | -.0084 | -.0060 | | | | |
| .585 | | | .0440 | | | | | | |
| .600 | | | | | | | -.1519 | | |
| .637 | | .0303 | | | | | | | |
| .650 | | | | | | -.0554 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0250 | | | | |
| .725 | | | | -.0008 | | | | | |
| .730 | | | | | | | | | -.2513 |
| .750 | | | | | | -.0796 | -.1427 | | |
| .760 | | | -.0737 | | | | | | |
| .775 | | | | .0373 | .0411 | | | | |
| .798 | | -.1033 | | | | | | | |
| .809 | | | -.0490 | | | | | | |
| .834 | -.1580 | | | | | | | | |
| .839 | | -.1265 | | | | | | | |
| .850 | | | | .0271 | .0595 | -.0926 | | | |
| .857 | | | -.1031 | | | | | | |
| .862 | | | | | | | | -.1481 | |
| .865 | -.1505 | | | | | | | | |
| .879 | | -.1451 | | | | | | | |
| .900 | -.1268 | | | -.0339 | | | -.1437 | | |
| .905 | | | -.1400 | | | | | | |
| .919 | | -.1296 | | | | | | | |
| .950 | | | | -.0959 | -.0431 | -.1188 | | | |
| .953 | | | -.1261 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .985 | -.0919 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 1) = -6.303 BETAO ( 5) = 4.052

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1630 | | -.1192 | | -.1215 | | |

ALPHAO( 2) = -4.273 BETAO ( 1) = -6.424

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0630 | .1557 | .4514 | .8805 | .8465 | .8362 | .8358 | .0204 | |
| .010 | .0152 | .1283 | .2978 | .1943 | .1203 | .1657 | .2015 | | |
| .020 | -.0135 | .1128 | .2234 | .0666 | .0667 | .0319 | .0224 | -.0344 | |
| .040 | | .1506 | .0828 | | | | | | |
| .050 | -.0194 | | | .0108 | .0223 | - 0149 | -.0169 | | |
| .069 | | | | | | | | -.0491 | |
| .080 | | | | .0007 | | | | | |
| .091 | | | .0929 | | | | | | |
| .086 | | .1366 | | | | | | | |
| .094 | -.0330 | | | | | | | | |
| .150 | | | | -.0180 | -.0138 | .0247 | -.0189 | | |
| .157 | | | | | | | | -.0426 | |
| .163 | | .1838 | | | | | | | |
| .177 | | | -.0132 | | | | | | |
| .229 | .1813 | | | | | | | | |
| .246 | | .0351 | | | | | | | |
| .250 | | | | -.0156 | -.0249 | -.0114 | -.0149 | | |
| .274 | | | .0118 | | | | | | |
| .345 | | | | | | | | -.0234 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0551 | | | | | | | |
| .400 | | | | .0128 | -.0256 | | -.0245 | | |
| .402 | | | -.0071 | | | | | | |
| .418 | | | | | | | | | -.0519 |
| .497 | .0412 | | | | | | | | |
| .503 | | | | | | | | -.0282 | |
| .550 | | | | .0699 | -.0143 | | | | |
| .565 | | | .1747 | | | | | | |
| .600 | | | | | | | -.0402 | | |
| .637 | | .1945 | | | | | | | |
| .650 | | | | | | -.0524 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0283 | | | | |
| .725 | | | | .2281 | | | | | |
| .730 | | | | | | | | | -.1155 |
| .750 | | | | | | -.1142 | -.1207 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 2) = -4.273 BETAO ( 1) = -6.424

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .1288 | | | | | | |
| .775 | | | | .2799 | .2159 | | | | |
| .798 | | .1324 | | | | | | | |
| .808 | | | .4290 | | | | | | |
| .834 | -.0375 | | | | | | | | |
| .839 | | .0976 | | | | | | | |
| .850 | | | | .3349 | .2015 | -.1476 | | | |
| .857 | | | .3022 | | | | | | |
| .862 | | | | | | | | -.1093 | |
| .865 | .0213 | | | | | | | | |
| .879 | | .2199 | | | | | | | |
| .900 | .0179 | | | .2372 | | | -.1542 | | |
| .905 | | | .1359 | | | | | | |
| .919 | | .1385 | | | | | | | |
| .950 | | | | .1280 | .1550 | -.1026 | | | |
| .953 | | | .0615 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0388 | | | | | | | | |
| 1.000 | | | -.0778 | | -.1136 | | -.1484 | | |

ALPHAO( 2) = -4.268 BETAO ( 2) = -4.362

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0388 | .1225 | .3791 | .8087 | .7673 | .7540 | .7683 | -.0141 | |
| .010 | -.0095 | .0957 | .2474 | .1575 | .0903 | .1316 | .1741 | | |
| .020 | -.0355 | .0835 | .1860 | .0419 | .0349 | .0047 | .0051 | -.0609 | |
| .043 | | .1155 | .1134 | | | | | | |
| .050 | -.0005 | | | -.0113 | -.0086 | -.0371 | -.0353 | | |
| .069 | | | | | | | | -.0719 | |
| .080 | | | | -.0250 | | | | | |
| .081 | | | .0612 | | | | | | |
| .086 | | .0971 | | | | | | | |
| .094 | -.0225 | | | | | | | | |
| .150 | | | | -.0394 | -.0375 | -.0036 | -.0446 | | |
| .157 | | | | | | | | -.0639 | |
| .163 | | .1519 | | | | | | | |
| .177 | | | .0249 | | | | | | |
| .229 | .1484 | | | | | | | | |
| .245 | | .0696 | | | | | | | |
| .250 | | | | .0060 | -.0464 | -.0393 | -.0358 | | |
| .274 | | | -.0243 | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 2) = -4.268 BETAO ( 2) = -4.362

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | -.0418 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0231 | | | | | | | |
| .400 | | | | -.0048 | -.0289 | | -.0495 | | |
| .402 | | | -.0190 | | | | | | |
| .418 | | | | | | | | | -.0808 |
| .497 | .0152 | | | | | | | | |
| .503 | | | | | | | | -.0482 | |
| .550 | | | | .0713 | -.0316 | | | | |
| .565 | | | .1302 | | | | | | |
| .600 | | | | | | | -.0619 | | |
| .637 | | .1435 | | | | | | | |
| .650 | | | | | | -.0563 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0319 | | | | |
| .725 | | | | .1644 | | | | | |
| .730 | | | | | | | | | -.1289 |
| .750 | | | | | | -.1223 | -.1331 | | |
| .760 | | | .0978 | | | | | | |
| .775 | | | | .2385 | .1779 | | | | |
| .798 | | .1013 | | | | | | | |
| .808 | | | .3583 | | | | | | |
| .834 | -.0318 | | | | | | | | |
| .839 | | .0673 | | | | | | | |
| .850 | | | | .2697 | .1688 | -.1343 | | | |
| .857 | | | .2609 | | | | | | |
| .852 | | | | | | | | -.1159 | |
| .855 | .0242 | | | | | | | | |
| .879 | | .1913 | | | | | | | |
| .900 | -.0335 | | | .1828 | | | -.1541 | | |
| .905 | | | .1190 | | | | | | |
| .919 | | .1089 | | | | | | | |
| .950 | | | | .0909 | .1186 | -.1083 | | | |
| .953 | | | .0493 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0360 | | | | | | | | |
| 1.000 | | | -.0936 | | -.1089 | | -.1518 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHA0( 2) = -4.242 BETA0 ( 3) = -.145

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0076 | .0522 | .2856 | .6061 | .6031 | .5730 | .5935 | -.0844 | |
| .010 | -.0155 | .0486 | .1633 | .0897 | .0199 | .0509 | .0809 | | |
| .020 | -.0155 | .0506 | .1065 | -.0005 | -.0266 | -.0598 | -.0572 | -.1172 | |
| .040 | | .0476 | .0635 | | | | | | |
| .050 | -.0115 | | | -.0394 | -.0661 | -.0931 | -.0946 | | |
| .069 | | | | | | | | -.1229 | |
| .080 | | | | -.0560 | | | | | |
| .081 | | | -.0129 | | | | | | |
| .086 | | .0324 | | | | | | | |
| .094 | -.0349 | | | | | | | | |
| .150 | | | | -.0900 | -.0909 | -.0449 | -.1026 | | |
| .157 | | | | | | | | -.1175 | |
| .163 | | .0589 | | | | | | | |
| .177 | | | -.0116 | | | | | | |
| .229 | .0494 | | | | | | | | |
| .246 | | .0341 | | | | | | | |
| .250 | | | | -.0436 | -.0991 | -.0899 | -.0847 | | |
| .274 | | | -.0430 | | | | | | |
| .345 | | | | | | | | -.0967 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0174 | | | | | | | |
| .400 | | | | .0440 | -.0948 | | -.1021 | | |
| .402 | | | .1078 | | | | | | |
| .418 | | | | | | | | | -.1351 |
| .497 | -.0098 | | | | | | | | |
| .503 | | | | | | | | -.0998 | |
| .550 | | | | .0426 | -.0023 | | | | |
| .555 | | | .0373 | | | | | | |
| .600 | | | | | | | -.1128 | | |
| .637 | | .0579 | | | | | | | |
| .650 | | | | | | -.0856 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0682 | | | | |
| .725 | | | | .0988 | | | | | |
| .730 | | | | | | | | | -.1872 |
| .750 | | | | | | -.0682 | -.1697 | | |
| .760 | | | .0370 | | | | | | |
| .775 | | | | .1629 | .1172 | | | | |
| .798 | | .0179 | | | | | | | |
| .809 | | | .1624 | | | | | | |
| .834 | -.1024 | | | | | | | | |
| .839 | | -.0002 | | | | | | | |
| .850 | | | | .1540 | .1117 | -.0742 | | | |
| .857 | | | .1091 | | | | | | |
| .962 | | | | | | | | -.1144 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 2) = -4.242 BETAO ( 3) = -.145

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .885 | -.0717 | | | | | | | | |
| .879 | | -.0184 | | | | | | | |
| .900 | -.1041 | | | .0789 | | | -.1637 | | |
| .905 | | | .0079 | | | | | | |
| .919 | | .0008 | | | | | | | |
| .950 | | | | .0057 | .0294 | -.0983 | | | |
| .953 | | | -.0450 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0480 | | | | | | | | |
| 1.000 | | | -.1348 | | -.1124 | | -.1496 | | |

ALPHAO( 2) = -4.216 BETAO ( 4) = 4.041

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0311 | -.0250 | .1904 | .5197 | .3882 | .4030 | .4689 | -.1447 | |
| .010 | -.0237 | -.0112 | .1522 | .0119 | -.0868 | .0008 | .0090 | | |
| .020 | -.0281 | -.0158 | .1178 | -.0741 | -.1168 | -.0941 | -.1075 | -.1708 | |
| .040 | | -.0204 | .0098 | | | | | | |
| .050 | -.0645 | | | -.1212 | -.1373 | -.1380 | -.1432 | | |
| .069 | | | | | | | | -.1781 | |
| .080 | | | | -.1114 | | | | | |
| .081 | | | -.0302 | | | | | | |
| .086 | | -.0125 | | | | | | | |
| .094 | -.0582 | | | | | | | | |
| .150 | | | | -.0882 | -.1343 | -.0855 | -.1479 | | |
| .157 | | | | | | | | -.1731 | |
| .163 | | .0113 | | | | | | | |
| .177 | | | -.0369 | | | | | | |
| .229 | -.0130 | | | | | | | | |
| .246 | | .0078 | | | | | | | |
| .250 | | | | -.0634 | -.1007 | -.1398 | -.1166 | | |
| .274 | | | -.0438 | | | | | | |
| .345 | | | | | | | | -.1403 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0275 | | | | | | | |
| .400 | | | | .0433 | -.0107 | | -.1467 | | |
| .402 | | | .0811 | | | | | | |
| .418 | | | | | | | | | -.1881 |
| .497 | -.0003 | | | | | | | | |
| .503 | | | | | | | | -.1400 | |
| .550 | | | | .0207 | .0204 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 2) = -4.216 BETAO ( 4) = 4.041

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .585 | | | .0537 | | | | | | |
| .600 | | | | | | | -.1266 | | |
| .637 | | .0339 | | | | | | | |
| .650 | | | | | | -.0094 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0270 | | | | |
| .725 | | | | .0354 | | | | | |
| .730 | | | | | | | | | -.2229 |
| .750 | | | | | | -.0398 | -.1248 | | |
| .760 | | | -.0573 | | | | | | |
| .775 | | | | .0694 | .0993 | | | | |
| .798 | | -.0985 | | | | | | | |
| .808 | | | -.0306 | | | | | | |
| .834 | -.1532 | | | | | | | | |
| .839 | | -.1173 | | | | | | | |
| .850 | | | | .0566 | .0941 | -.0558 | | | |
| .857 | | | -.0858 | | | | | | |
| .862 | | | | | | | | -.1309 | |
| .865 | -.1448 | | | | | | | | |
| .879 | | -.1249 | | | | | | | |
| .900 | -.1217 | | | -.0189 | | | -.1142 | | |
| .905 | | | -.1188 | | | | | | |
| .919 | | -.1163 | | | | | | | |
| .950 | | | | -.0848 | -.0375 | -.0935 | | | |
| .953 | | | -.1162 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0835 | | | | | | | | |
| 1.000 | | | -.1595 | | -.1291 | | -.1212 | | |

ALPHAO( 2) = -4.212 BETAO ( 5) = 6.106

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0480 | -.0605 | .1301 | .4583 | .3763 | .3142 | .3191 | -.1732 | |
| .010 | -.0330 | -.0595 | .0989 | -.0155 | -.0935 | -.0684 | -.0599 | | |
| .020 | -.0370 | -.0565 | .0714 | -.0935 | -.1275 | -.1572 | -.1479 | -.1907 | |
| .040 | | -.0565 | .0097 | | | | | | |
| .050 | -.0758 | | | -.1109 | -.1575 | -.1824 | -.1740 | | |
| .069 | | | | | | | | -.1954 | |
| .080 | | | | -.0981 | | | | | |
| .081 | | | -.0221 | | | | | | |
| .086 | | -.0191 | | | | | | | |

ARC97-019 !A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 2) = -4.212 BETAO ( 5) = 6.106

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0624 | | | | | | | | |
| .150 | | | | -.1004 | -.1625 | -.1205 | -.1690 | | |
| .157 | | | | | | | | -.1954 | |
| .163 | | .0230 | | | | | | | |
| .177 | | | -.0615 | | | | | | |
| .229 | -.0387 | | | | | | | | |
| .246 | | -.0221 | | | | | | | |
| .250 | | | | -.0666 | -.1324 | -.1569 | -.1290 | | |
| .274 | | | -.0357 | | | | | | |
| .345 | | | | | | | | -.1498 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0288 | | | | | | | |
| .400 | | | | .0405 | -.0015 | | -.1591 | | |
| .402 | | | .0843 | | | | | | |
| .418 | | | | | | | | | -.2017 |
| .497 | -.0336 | | | | | | | | |
| .503 | | | | | | | | -.1394 | |
| .550 | | | | .0248 | -.0133 | | | | |
| .565 | | | .0256 | | | | | | |
| .600 | | | | | | | -.0676 | | |
| .637 | | -.0115 | | | | | | | |
| .650 | | | | | | -.0324 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0100 | | | | |
| .725 | | | | -.0080 | | | | | |
| .730 | | | | | | | | | -.2050 |
| .750 | | | | | | -.0642 | -.1018 | | |
| .760 | | | -.0947 | | | | | | |
| .775 | | | | .0133 | .0575 | | | | |
| .798 | | -.1250 | | | | | | | |
| .808 | | | -.0738 | | | | | | |
| .834 | -.1508 | | | | | | | | |
| .839 | | -.0969 | | | | | | | |
| .850 | | | | -.0449 | -.0156 | -.0984 | | | |
| .857 | | | -.0837 | | | | | | |
| .862 | | | | | | | | -.1270 | |
| .865 | -.1019 | | | | | | | | |
| .879 | | -.1012 | | | | | | | |
| .900 | -.1106 | | | -.1007 | | | - 1263 | | |
| .905 | | | -.1139 | | | | | | |
| .919 | | -.1317 | | | | | | | |
| .950 | | | | -.1331 | -.1047 | -.1215 | | | |
| .953 | | | -.1536 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0860 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHA0( 2) = -4.212 BETA0 ( 5) = 6.106

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1709 | | -.1483 | | -.1330 | | |

ALPHA0( 3) = -2.199 BETA0 ( 1) = -6.426

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0492 | .1465 | .4501 | .9085 | .8485 | .8428 | .8513 | .0722 | |
| .010 | .0118 | .1296 | .3179 | .2294 | .1463 | .1969 | .2551 | | |
| .020 | -.0153 | .1031 | .2408 | .0951 | .0994 | .0812 | .0674 | .0246 | |
| .040 | | .1263 | .1007 | | | | | | |
| .050 | -.0227 | | | .0336 | .0590 | .0343 | .0285 | | |
| .069 | | | | | | | | .0064 | |
| .080 | | | | .0169 | | | | | |
| .081 | | | .1070 | | | | | | |
| .086 | | .1329 | | | | | | | |
| .094 | -.0404 | | | | | | | | |
| .150 | | | | .0021 | .0183 | .0566 | .0242 | | |
| .157 | | | | | | | | .0061 | |
| .163 | | .1846 | | | | | | | |
| .177 | | | .0020 | | | | | | |
| .229 | .1770 | | | | | | | | |
| .246 | | .0382 | | | | | | | |
| .250 | | | | -.0018 | .0048 | .0212 | .0239 | | |
| .274 | | | .0245 | | | | | | |
| .345 | | | | | | | | .0175 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0669 | | | | | | | |
| .400 | | | | .0159 | -.0054 | | .0132 | | |
| .402 | | | .0053 | | | | | | |
| .418 | | | | | | | | | .0046 |
| .497 | .0457 | | | | | | | | |
| .503 | | | | | | | | .0071 | |
| .550 | | | | .0657 | .0087 | | | | |
| .585 | | | .1881 | | | | | | |
| .600 | | | | | | | -.0113 | | |
| .637 | | .1988 | | | | | | | |
| 650 | | | | | | -.0250 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0096 | | | | |
| .725 | | | | .2589 | | | | | |
| .730 | | | | | | | | | -.0600 |
| .750 | | | | | | -.0953 | -.0575 | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 3) = -2.199 BETAO ( 1) = -6.426

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .1659 | | | | | | |
| .775 | | | | .2962 | .2267 | | | | |
| .798 | | .1519 | | | | | | | |
| .808 | | | .4269 | | | | | | |
| 834 | -.0277 | | | | | | | | |
| .839 | | .2408 | | | | | | | |
| .850 | | | | .3610 | .2149 | -.1328 | | | |
| .857 | | | .3146 | | | | | | |
| .862 | | | | | | | | -.0905 | |
| .865 | .0329 | | | | | | | | |
| .879 | | .2484 | | | | | | | |
| .900 | .1214 | | | .2608 | | | -.1528 | | |
| .905 | | | .1540 | | | | | | |
| .919 | | .1482 | | | | | | | |
| .950 | | | | .1497 | .1788 | -.0876 | | | |
| .953 | | | .0769 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0345 | | | | | | | | |
| 1.000 | | | -.0761 | | -.1155 | | -.1387 | | |

ALPHAO( 3) = -2.186 BETAO ( 2) = -2.253

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0071 | .0662 | .3050 | .7504 | .7006 | .6960 | .7017 | -.0094 | |
| .010 | -.0361 | .0553 | .2335 | .1613 | .0835 | .1239 | .1631 | | |
| .020 | -.0445 | .0407 | .2076 | .0502 | .0395 | .0098 | .0071 | -.0436 | |
| .040 | | .0652 | .1342 | | | | | | |
| .050 | -.0099 | | | -.0029 | -.0019 | -.0302 | -.0341 | | |
| .069 | | | | | | | | -.0567 | |
| .080 | | | | -.0200 | | | | | |
| .081 | | | .0367 | | | | | | |
| .086 | | .0715 | | | | | | | |
| .094 | -.0398 | | | | | | | | |
| .150 | | | | -.0515 | -.0380 | -.0046 | -.0438 | | |
| .157 | | | | | | | | -.0561 | |
| .163 | | .1140 | | | | | | | |
| .177 | | | -.0270 | | | | | | |
| 229 | .1203 | | | | | | | | |
| .246 | | .0024 | | | | | | | |
| .250 | | | | -.0233 | -.0525 | -.0425 | -.0354 | | |
| .274 | | | -.0367 | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 3) = -2.186 BETAO ( 2) = -2.253

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | -.0453 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0001 | | | | | | | |
| .400 | | | | -.0269 | -.0509 | | -.0467 | | |
| .402 | | | -.0214 | | | | | | |
| .418 | | | | | | | | | -.0665 |
| .497 | -.0056 | | | | | | | | |
| .503 | | | | | | | | -.0530 | |
| .550 | | | | .0705 | -.0519 | | | | |
| .565 | | | .0825 | | | | | | |
| .600 | | | | | | | -.0678 | | |
| .637 | | .1002 | | | | | | | |
| .650 | | | | | | -.0739 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0672 | | | | |
| .725 | | | | .1394 | | | | | |
| .730 | | | | | | | | | -.1253 |
| .750 | | | | | | -.1325 | -.1406 | | |
| .760 | | | .0795 | | | | | | |
| .775 | | | | .1886 | .1577 | | | | |
| .798 | | .0813 | | | | | | | |
| .809 | | | .2992 | | | | | | |
| .834 | -.0334 | | | | | | | | |
| .939 | | .0674 | | | | | | | |
| .850 | | | | .2155 | .1551 | -.0880 | | | |
| .857 | | | .2142 | | | | | | |
| .862 | | | | | | | | -.1178 | |
| .855 | .0058 | | | | | | | | |
| .879 | | .0929 | | | | | | | |
| .900 | -.0680 | | | .1476 | | | -.1561 | | |
| .905 | | | .0851 | | | | | | |
| .919 | | .0664 | | | | | | | |
| .950 | | | | .0676 | .0819 | -.0930 | | | |
| .953 | | | .0251 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0528 | | | | | | | | |
| 1.000 | | | -.1209 | | -.1240 | | -.1514 | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 3) = -2.171 BETAO ( 3) = 1.947

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0356 | .0004 | .2160 | .4955 | .5454 | .5171 | .5484 | -.0805 | |
| .010 | -.0192 | .0084 | .1391 | .0542 | .0071 | .0427 | .0762 | | |
| .020 | -.0105 | .0081 | .1281 | -.0216 | -.0337 | -.0516 | -.0550 | -.1041 | |
| .040 | | .0041 | .0318 | | | | | | |
| .050 | -.0561 | | | -.0476 | -.0724 | -.0858 | -.0916 | | |
| .069 | | | | | | | | -.1121 | |
| .080 | | | | -.0653 | | | | | |
| .081 | | | -.0389 | | | | | | |
| .086 | | -.0075 | | | | | | | |
| .094 | -.0786 | | | | | | | | |
| .150 | | | | -.0719 | -.0999 | -.0523 | -.1010 | | |
| .157 | | | | | | | | -.1088 | |
| .163 | | .0210 | | | | | | | |
| .177 | | | -.0542 | | | | | | |
| .229 | .0124 | | | | | | | | |
| .248 | | -.0078 | | | | | | | |
| .250 | | | | -.0722 | -.1082 | -.0983 | -.0819 | | |
| .274 | | | -.0167 | | | | | | |
| .345 | | | | | | | | -.0957 | |
| .362 | .0000 | | | | | | | | |
| .370 | | .0101 | | | | | | | |
| .400 | | | | .0519 | -.0812 | | -.1037 | | |
| .402 | | | .1009 | | | | | | |
| .418 | | | | | | | | | -.1226 |
| .497 | .0322 | | | | | | | | |
| .503 | | | | | | | | -.1000 | |
| .550 | | | | .0598 | .0275 | | | | |
| .565 | | | .0670 | | | | | | |
| .500 | | | | | | | -.1195 | | |
| .637 | | .0814 | | | | | | | |
| .650 | | | | | | -.0147 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0913 | | | | |
| .725 | | | | .0834 | | | | | |
| .730 | | | | | | | | | -.1730 |
| .750 | | | | | | -.0174 | -.1515 | | |
| .760 | | | -.0034 | | | | | | |
| .775 | | | | .2151 | .1711 | | | | |
| .798 | | -.0489 | | | | | | | |
| .808 | | | .0650 | | | | | | |
| .834 | -.1384 | | | | | | | | |
| .839 | | .0771 | | | | | | | |
| .850 | | | | .1356 | .1323 | -.0359 | | | |
| .857 | | | .0222 | | | | | | |
| .862 | | | | | | | | -.1152 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 3) = -2.171 BETAO ( 3) = 1.947

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.1159 | | | | | | | | |
| .879 | | -.0575 | | | | | | | |
| .900 | -.1249 | | | .0323 | | | -.1475 | | |
| .905 | | | -.0638 | | | | | | |
| .919 | | -.0711 | | | | | | | |
| .950 | | | | -.0476 | .0000 | -.0725 | | | |
| .953 | | | -.0997 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .955 | -.0746 | | | | | | | | |
| 1.000 | | | -.1598 | | -.1308 | | -.1569 | | |

ALPHAO( 3) = -2.158 BETAO ( 4) = 6.083

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0657 | -.0753 | .1141 | .4226 | .3500 | .3730 | .4274 | -.1421 | |
| .010 | -.0579 | -.0673 | .0853 | -.0220 | -.0793 | -.0171 | .0053 | | |
| .020 | -.0636 | -.0627 | .0597 | -.0926 | -.1115 | -.0999 | -.1061 | -.1573 | |
| .040 | | -.0637 | .0012 | | | | | | |
| .050 | -.0992 | | | -.0985 | -.1224 | -.1294 | -.1376 | | |
| .069 | | | | | | | | -.1610 | |
| .080 | | | | -.0922 | | | | | |
| .081 | | | -.0334 | | | | | | |
| .085 | | -.0255 | | | | | | | |
| .094 | -.0965 | | | | | | | | |
| .150 | | | | -.0968 | -.1188 | -.0835 | -.1453 | | |
| .157 | | | | | | | | -.1556 | |
| .163 | | .0134 | | | | | | | |
| .177 | | | -.0713 | | | | | | |
| 229 | -.0619 | | | | | | | | |
| .245 | | -.0285 | | | | | | | |
| .250 | | | | -.0860 | -.1038 | -.1262 | -.1149 | | |
| .274 | | | -.0487 | | | | | | |
| .345 | | | | | | | | -.1233 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0465 | | | | | | | |
| .400 | | | | .0604 | .0262 | | -.1149 | | |
| .402 | | | .0916 | | | | | | |
| .418 | | | | | | | | | -.1552 |
| .497 | -.0428 | | | | | | | | |
| .503 | | | | | | | | -.1119 | |
| .550 | | | | .0795 | .0328 | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 3) = -2.158 BETAO ( 4) = 6.083

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .0627 | | | | | | |
| .600 | | | | | | | -.0527 | | |
| .637 | | .0119 | | | | | | | |
| .650 | | | | | | .0338 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0771 | | | | |
| .725 | | | | .0224 | | | | | |
| .730 | | | | | | | | | -.1639 |
| .750 | | | | | | -.0259 | -.0460 | | |
| .760 | | | -.0872 | | | | | | |
| .775 | | | | .0427 | .1083 | | | | |
| .798 | | -.1178 | | | | | | | |
| .808 | | | -.0533 | | | | | | |
| .834 | -.1337 | | | | | | | | |
| .839 | | -.0727 | | | | | | | |
| .850 | | | | -.0269 | .0334 | -.0162 | | | |
| .857 | | | -.0626 | | | | | | |
| .852 | | | | | | | | -.0903 | |
| .865 | -.0804 | | | | | | | | |
| .879 | | -.0939 | | | | | | | |
| .900 | -.1035 | | | -.0780 | | | -.0675 | | |
| .905 | | | -.1118 | | | | | | |
| .919 | | -.1300 | | | | | | | |
| .950 | | | | -.1118 | -.0914 | -.0712 | | | |
| .953 | | | -.1507 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0806 | | | | | | | | |
| 1.000 | | | -.1703 | | -.1669 | | -.1277 | | |

ALPHAO( 4) = -.138 BETAO ( 1) = -6.431

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0340 | .1256 | .4460 | .9154 | .8689 | .8608 | .8790 | .1136 | |
| .010 | .0040 | .1069 | .3209 | .2394 | .1754 | .2264 | .3067 | | |
| .020 | -.0235 | .0807 | .2587 | .1045 | .1322 | .1195 | .1048 | .0755 | |
| .040 | | .0710 | .0931 | | | | | | |
| .050 | -.0325 | | | .0483 | .0904 | .0725 | .0665 | | |
| .069 | | | | | | | | .0493 | |
| .080 | | | | .0183 | | | | | |
| .081 | | | .1091 | | | | | | |
| .086 | | .1332 | | | | | | | |

APC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 4) = -.138 BETAO ( 1) = -6.431

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0131 | | | | | | | | |
| .150 | | | | .0170 | .0390 | .0762 | .0577 | | |
| .157 | | | | | | | | .0425 | |
| .163 | | .1385 | | | | | | | |
| .177 | | | .0060 | | | | | | |
| .229 | .1305 | | | | | | | | |
| .246 | | .0180 | | | | | | | |
| .250 | | | | .0078 | .0201 | .0463 | .0560 | | |
| .274 | | | .0353 | | | | | | |
| .345 | | | | | | | | .0503 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0824 | | | | | | | |
| .400 | | | | .0147 | .0160 | | .0422 | | |
| .402 | | | .0140 | | | | | | |
| .418 | | | | | | | | | .0394 |
| .497 | .0527 | | | | | | | | |
| .503 | | | | | | | | .0355 | |
| .550 | | | | .0581 | .0291 | | | | |
| .565 | | | .1935 | | | | | | |
| .600 | | | | | | | .0095 | | |
| .637 | | .1934 | | | | | | | |
| .650 | | | | | | -.0017 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0088 | | | | |
| .725 | | | | .2842 | | | | | |
| .730 | | | | | | | | | -.0285 |
| .750 | | | | | | -.0766 | -.0854 | | |
| .760 | | | .2640 | | | | | | |
| .775 | | | | .3184 | .2425 | | | | |
| .798 | | .1482 | | | | | | | |
| .808 | | | .4286 | | | | | | |
| .834 | -.0077 | | | | | | | | |
| .839 | | .3336 | | | | | | | |
| .850 | | | | .3861 | .2415 | -.1230 | | | |
| .857 | | | .3285 | | | | | | |
| .862 | | | | | | | | -.0887 | |
| .855 | .0508 | | | | | | | | |
| .879 | | .2930 | | | | | | | |
| .900 | .1647 | | | .2859 | | | -.1484 | | |
| .905 | | | .1752 | | | | | | |
| .919 | | .1456 | | | | | | | |
| .950 | | | | .1671 | .1971 | -.0988 | | | |
| .953 | | | .0948 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0314 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (PCTL37)

ALPHAO( 4) = -.138 BETAO ( 1) = -6.431

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.0841 | | -.1359 | | -.1399 | | |

ALPHAO( 4) = -.135 BETAO ( 2) = -4.375

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0053 | .0810 | .3954 | .8529 | .7881 | .7943 | .8028 | .0715 | |
| .010 | -.0221 | .0694 | .2831 | .2091 | .1347 | .1923 | .2585 | | |
| .020 | -.0459 | .0454 | .2177 | .0816 | .0959 | .0868 | .0740 | .0392 | |
| .040 | | .0374 | .0663 | | | | | | |
| .050 | -.0178 | | | .0209 | .0597 | .0392 | .0348 | | |
| .069 | | | | | | | | .0194 | |
| .080 | | | | -.0002 | | | | | |
| .081 | | | .0836 | | | | | | |
| .086 | | .0946 | | | | | | | |
| .094 | -.0543 | | | | | | | | |
| .150 | | | | -.0035 | .0100 | .0512 | .0274 | | |
| .157 | | | | | | | | .0123 | |
| .163 | | .1564 | | | | | | | |
| .177 | | | -.0084 | | | | | | |
| .229 | .0701 | | | | | | | | |
| .246 | | .0144 | | | | | | | |
| .250 | | | | .0008 | -.0069 | .0133 | .0264 | | |
| .274 | | | .0006 | | | | | | |
| .345 | | | | | | | | .0197 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0399 | | | | | | | |
| .400 | | | | -.0067 | -.0075 | | .0109 | | |
| .402 | | | -.0090 | | | | | | |
| .418 | | | | | | | | | .0060 |
| .497 | .0208 | | | | | | | | |
| .503 | | | | | | | | .0048 | |
| .550 | | | | .0918 | .0024 | | | | |
| .565 | | | .1606 | | | | | | |
| .600 | | | | | | | -.0160 | | |
| .637 | | .1514 | | | | | | | |
| .650 | | | | | | -.0198 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0094 | | | | |
| .725 | | | | .2232 | | | | | |
| .730 | | | | | | | | | -.0589 |
| .750 | | | | | | -.0937 | -.1010 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHA0( 4) = -.135 BETA0 ( 2) = -4.375

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .1072 | | | | | | |
| .775 | | | | .2715 | .2097 | | | | |
| .798 | | .1239 | | | | | | | |
| .808 | | | .3957 | | | | | | |
| .834 | -.0218 | | | | | | | | |
| .839 | | .1909 | | | | | | | |
| .850 | | | | .3121 | .2041 | -.1333 | | | |
| .857 | | | .2924 | | | | | | |
| .862 | | | | | | | | -.1003 | |
| .865 | .0248 | | | | | | | | |
| .879 | | .1972 | | | | | | | |
| .900 | .0768 | | | .2276 | | | -.1602 | | |
| .905 | | | .1424 | | | | | | |
| .919 | | .1295 | | | | | | | |
| .950 | | | | .1291 | .1585 | -.0853 | | | |
| .953 | | | .0551 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0367 | | | | | | | | |
| 1.000 | | | -.1083 | | -.1258 | | -.1501 | | |

ALPHA0( 4) = -.128 BETA0 ( 3) = -.174

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0408 | .0101 | .2787 | .6988 | .6384 | .6337 | .6428 | -.0051 | |
| .010 | -.0547 | .0021 | .2064 | .1440 | .0834 | .1082 | .1615 | | |
| .020 | -.0379 | .0071 | .1495 | .0350 | .0453 | .0104 | .0063 | -.0227 | |
| .040 | | .0417 | .0251 | | | | | | |
| .050 | -.0478 | | | -.0137 | -.0035 | -.0314 | -.0306 | | |
| .069 | | | | | | | | -.0388 | |
| .080 | | | | -.0266 | | | | | |
| .081 | | | .0284 | | | | | | |
| .086 | | .0310 | | | | | | | |
| .094 | -.0971 | | | | | | | | |
| .150 | | | | -.0641 | -.0498 | -.0024 | -.0414 | | |
| .157 | | | | | | | | -.0429 | |
| .163 | | .0847 | | | | | | | |
| .177 | | | -.0611 | | | | | | |
| .229 | .0314 | | | | | | | | |
| .246 | | -.0092 | | | | | | | |
| .250 | | | | -.0674 | -.0619 | -.0477 | -.0334 | | |
| .274 | | | -.0485 | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHA0( 4) = -.128 BETA0 ( 3) = -.174

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | -.0402 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0018 | | | | | | | |
| .400 | | | | .0469 | -.0686 | | -.0469 | | |
| .402 | | | .1242 | | | | | | |
| .418 | | | | | | | | | -.0538 |
| .497 | .0132 | | | | | | | | |
| .503 | | | | | | | | -.0506 | |
| .550 | | | | .0666 | .0131 | | | | |
| .565 | | | .0773 | | | | | | |
| .600 | | | | | | | -.0671 | | |
| .637 | | .0852 | | | | | | | |
| .650 | | | | | | -.0803 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1095 | | | | |
| .725 | | | | .1598 | | | | | |
| .730 | | | | | | | | | -.1066 |
| .750 | | | | | | -.0612 | -.1416 | | |
| .760 | | | .0770 | | | | | | |
| .775 | | | | .2307 | .1619 | | | | |
| .798 | | .0367 | | | | | | | |
| .808 | | | .2327 | | | | | | |
| .834 | -.0924 | | | | | | | | |
| .839 | | .0304 | | | | | | | |
| .850 | | | | .2318 | .1800 | -.0316 | | | |
| .857 | | | .1442 | | | | | | |
| .862 | | | | | | | | -.1120 | |
| .865 | -.0591 | | | | | | | | |
| .879 | | .0304 | | | | | | | |
| .900 | -.0924 | | | .1359 | | | -.1490 | | |
| .905 | | | .0317 | | | | | | |
| .919 | | -.0015 | | | | | | | |
| .950 | | | | .0433 | .0904 | -.0595 | | | |
| .953 | | | -.0378 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0539 | | | | | | | | |
| 1.000 | | | -.1433 | | -.1232 | | -.1537 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHA0( 4) = -.113 BETA0 ( 4) = 4.000

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0795 | -.0532 | .1526 | .5129 | .4808 | .4784 | .5176 | -.0641 | |
| .010 | -.0795 | -.0349 | .1341 | .0700 | .0016 | .0398 | .0884 | | |
| .020 | -.0708 | -.0359 | .1078 | -.0157 | -.0296 | -.0472 | -.0407 | -.0802 | |
| .040 | | -.0399 | .0112 | | | | | | |
| .050 | -.0883 | | | -.0668 | -.0647 | -.0798 | -.0759 | | |
| .069 | | | | | | | | -.0896 | |
| .080 | | | | -.0840 | | | | | |
| .081 | | | -.0396 | | | | | | |
| .086 | | -.0492 | | | | | | | |
| .094 | -.0903 | | | | | | | | |
| .150 | | | | -.0611 | -.0975 | -.0497 | -.0866 | | |
| .157 | | | | | | | | -.0899 | |
| .163 | | -.0086 | | | | | | | |
| .177 | | | -.0289 | | | | | | |
| .229 | -.0315 | | | | | | | | |
| .246 | | .0086 | | | | | | | |
| .250 | | | | -.0515 | -.0849 | -.0927 | -.0718 | | |
| .274 | | | -.0280 | | | | | | |
| .345 | | | | | | | | -.0819 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0218 | | | | | | | |
| .400 | | | | .0772 | -.0006 | | -.0889 | | |
| .402 | | | .1055 | | | | | | |
| .418 | | | | | | | | | -.0996 |
| .497 | -.0184 | | | | | | | | |
| .503 | | | | | | | | -.0883 | |
| .550 | | | | .1061 | .0980 | | | | |
| .565 | | | .0906 | | | | | | |
| .600 | | | | | | | -.0711 | | |
| .637 | | .0637 | | | | | | | |
| .650 | | | | | | .0834 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1341 | | | | |
| .725 | | | | .0920 | | | | | |
| .730 | | | | | | | | | -.1453 |
| .750 | | | | | | .0418 | -.0799 | | |
| .760 | | | -.0197 | | | | | | |
| .775 | | | | .2085 | .2350 | | | | |
| .798 | | -.0627 | | | | | | | |
| .808 | | | .0371 | | | | | | |
| .834 | -.1437 | | | | | | | | |
| .839 | | -.0783 | | | | | | | |
| .850 | | | | .0891 | .1410 | .0187 | | | |
| .857 | | | .0036 | | | | | | |
| .892 | | | | | | | | -.0986 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 4) = -.113 BETAO ( 4) = 4.000

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.1259 | | | | | | | | |
| .879 | | -.0514 | | | | | | | |
| .900 | -.1131 | | | -.0031 | | | -.0499 | | |
| .905 | | | -.0612 | | | | | | |
| .919 | | -.0922 | | | | | | | |
| .950 | | | | -.0733 | -.0301 | -.0367 | | | |
| .953 | | | -.1090 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0811 | | | | | | | | |
| 1.000 | | | -.1667 | | -.1517 | | -.1391 | | |

ALPHAO( 4) = -.090 BETAO ( 5) = 6.061

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0903 | -.0901 | .0837 | .4291 | .4253 | .4188 | .4421 | -.0947 | |
| .010 | -.0846 | -.0844 | .0680 | .0356 | -.0253 | .0081 | .0382 | | |
| .020 | -.0920 | -.0814 | .0524 | -.0363 | -.0561 | -.0762 | -.0745 | -.1058 | |
| .040 | | -.0811 | .0139 | | | | | | |
| .050 | -.1202 | | | -.0465 | -.0836 | -.1047 | -.1073 | | |
| .069 | | | | | | | | -.1112 | |
| .080 | | | | -.0661 | | | | | |
| .081 | | | -.0306 | | | | | | |
| .086 | | -.0323 | | | | | | | |
| .094 | -.1034 | | | | | | | | |
| .150 | | | | -.0839 | -.0968 | -.0785 | -.1110 | | |
| .157 | | | | | | | | -.0998 | |
| .163 | | .0085 | | | | | | | |
| .177 | | | -.0664 | | | | | | |
| .229 | -.0820 | | | | | | | | |
| .246 | | -.0248 | | | | | | | |
| .250 | | | | -.0474 | -.0882 | -.0959 | -.0823 | | |
| .274 | | | -.0103 | | | | | | |
| .345 | | | | | | | | -.0762 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0311 | | | | | | | |
| .400 | | | | .1009 | .0672 | | -.0658 | | |
| .402 | | | .1205 | | | | | | |
| .418 | | | | | | | | | -.0976 |
| .497 | -.0278 | | | | | | | | |
| .503 | | | | | | | | -.0749 | |
| .550 | | | | .1380 | .1817 | | | | |

ORIGINAL

ARC97-019 IA81 LVAP(ALLML SEALED) LEFT WING BOT. (RETE37)

ALPHAO( 4) = -.090 BETAO ( 5) = 6.061

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .1015 | | | | | | |
| .600 | | | | | | | .0198 | | |
| .637 | | .0685 | | | | | | | |
| .650 | | | | | | .1073 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0980 | | | | |
| .725 | | | | .0349 | | | | | |
| .730 | | | | | | | | | -.1154 |
| .750 | | | | | | .0349 | .0041 | | |
| .760 | | | -.0704 | | | | | | |
| .775 | | | | .0694 | .2027 | | | | |
| .798 | | -.0911 | | | | | | | |
| .808 | | | -.0259 | | | | | | |
| .834 | -.1182 | | | | | | | | |
| .839 | | -.0544 | | | | | | | |
| .850 | | | | .0068 | .0610 | .0091 | | | |
| .857 | | | -.0495 | | | | | | |
| .862 | | | | | | | | -.0637 | |
| .865 | -.0756 | | | | | | | | |
| .879 | | -.0911 | | | | | | | |
| .900 | -.1001 | | | -.0567 | | | -.0228 | | |
| .905 | | | -.1039 | | | | | | |
| .919 | | -.1312 | | | | | | | |
| .950 | | | | -.1074 | -.0968 | -.0728 | | | |
| .953 | | | -.1454 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .955 | -.0844 | | | | | | | | |
| 1.000 | | | -.1747 | | -.1775 | | -.1394 | | |

ALPHAO( 5) = 1.910 BETAO ( 1) = -8.431

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0185 | .0960 | .4454 | .9257 | .8898 | .8785 | .8923 | .1568 | |
| .010 | -.0097 | .0934 | .3434 | .2655 | .2076 | .2744 | .3614 | | |
| .020 | -.0353 | .0673 | .2784 | .1258 | .1717 | .1697 | .1564 | .1278 | |
| .040 | | .0520 | .1101 | | | | | | |
| .050 | .0842 | | | .0619 | .1222 | .1180 | .1203 | | |
| .069 | | | | | | | | .1002 | |
| .080 | | | | .0332 | | | | | |
| .081 | | | .1018 | | | | | | |
| .086 | | .1324 | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHA0( 5) = 1.916 BETA0 ( 1) = -6.431

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | .1176 | | | | | | | | |
| .150 | | | | .0259 | .0644 | .1257 | .1048 | | |
| .157 | | | | | | | | .0887 | |
| .163 | | .1047 | | | | | | | |
| .177 | | | .0125 | | | | | | |
| .229 | .0277 | | | | | | | | |
| .246 | | .0294 | | | | | | | |
| .250 | | | | .0230 | .0447 | .0809 | .0978 | | |
| .274 | | | .0385 | | | | | | |
| .345 | | | | | | | | .0907 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0703 | | | | | | | |
| .400 | | | | .0217 | .0356 | | .0762 | | |
| .402 | | | .0188 | | | | | | |
| .418 | | | | | | | | | .0706 |
| .497 | .0479 | | | | | | | | |
| .503 | | | | | | | | .0678 | |
| .550 | | | | .0833 | .0547 | | | | |
| .555 | | | .2071 | | | | | | |
| .600 | | | | | | | .0384 | | |
| .637 | | .1984 | | | | | | | |
| .650 | | | | | | .0217 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0284 | | | | |
| .725 | | | | .3183 | | | | | |
| .730 | | | | | | | | | -.0121 |
| .750 | | | | | | -.0478 | -.0678 | | |
| .760 | | | .3544 | | | | | | |
| .775 | | | | .3403 | .2791 | | | | |
| .798 | | .2010 | | | | | | | |
| .808 | | | .4243 | | | | | | |
| .834 | .0001 | | | | | | | | |
| .839 | | .3830 | | | | | | | |
| .850 | | | | .4039 | .2685 | -.0908 | | | |
| .857 | | | .3337 | | | | | | |
| .862 | | | | | | | | -.0812 | |
| .865 | .0840 | | | | | | | | |
| .879 | | .3062 | | | | | | | |
| .900 | .1573 | | | .3086 | | | -.1343 | | |
| .905 | | | .1948 | | | | | | |
| .919 | | .1485 | | | | | | | |
| .950 | | | | .1893 | .2132 | -.0941 | | | |
| .953 | | | .1071 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .955 | -.0311 | | | | | | | | |

ARC97-019 1AB1 LVAP(ALLML SEALED) LEFT WING BOT. (RETL37)

ALPHA0( 5) = 1.918 BETA0 ( 1) = -6.431

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.0914 | | -.1528 | | -.1427 | | |

ALPHA0( 5) = 1.918 BETA0 ( 2) = -2.268

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0422 | .0209 | .3507 | .8027 | .7337 | .7488 | .7478 | .0771 | |
| .010 | -.0585 | .0279 | .2703 | .2076 | .1395 | .1959 | .2728 | | |
| .020 | -.0727 | .0083 | .2143 | .0946 | .1119 | .0960 | .0926 | .0592 | |
| .040 | | .0013 | .1086 | | | | | | |
| .050 | -.0424 | | | .0259 | .0620 | .0499 | .0549 | | |
| .069 | | | | | | | | .0389 | |
| .080 | | | | .0113 | | | | | |
| .081 | | | .0430 | | | | | | |
| .086 | | .0787 | | | | | | | |
| .094 | .0691 | | | | | | | | |
| .150 | | | | -.0249 | .0074 | .0323 | .0431 | | |
| .157 | | | | | | | | .0285 | |
| .163 | | .1100 | | | | | | | |
| .177 | | | -.0391 | | | | | | |
| .229 | .0081 | | | | | | | | |
| .246 | | -.0160 | | | | | | | |
| .250 | | | | -.0094 | -.0059 | .0141 | .0366 | | |
| .274 | | | -.0177 | | | | | | |
| .345 | | | | | | | | .0261 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0100 | | | | | | | |
| .400 | | | | -.0157 | -.0104 | | .0163 | | |
| .402 | | | -.0304 | | | | | | |
| .418 | | | | | | | | | .0043 |
| .497 | -.0094 | | | | | | | | |
| .503 | | | | | | | | .0092 | |
| .550 | | | | .1073 | -.0325 | | | | |
| .565 | | | .1158 | | | | | | |
| .600 | | | | | | | -.0087 | | |
| .637 | | .1172 | | | | | | | |
| .650 | | | | | | -.0132 | | | |
| .672 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1102 | | | | |
| .725 | | | | .2244 | | | | | |
| .730 | | | | | | | | | -.0807 |
| .750 | | | | | | -.0927 | -.1008 | | |

ARC97-019 IA81 LVAP(ALLML SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 5) = 1.916 BETAO ( 2) = -2.268

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .1253 | | | | | | |
| .775 | | | | .2574 | .2167 | | | | |
| .790 | | .1152 | | | | | | | |
| .808 | | | .3913 | | | | | | |
| .834 | -.0107 | | | | | | | | |
| .839 | | .2068 | | | | | | | |
| .850 | | | | .2709 | .2117 | -.0954 | | | |
| .857 | | | .2827 | | | | | | |
| .862 | | | | | | | | -.1029 | |
| .865 | .0341 | | | | | | | | |
| .879 | | .1745 | | | | | | | |
| .900 | -.0249 | | | .1927 | | | -.1585 | | |
| .905 | | | .1270 | | | | | | |
| .919 | | .1132 | | | | | | | |
| .950 | | | | .1076 | .1389 | -.0708 | | | |
| .953 | | | .0376 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0508 | | | | | | | | |
| 1.000 | | | -.1324 | | -.1446 | | -.1558 | | |

ALPHAO( 5) = 1.931 BETAO ( 3) = 1.934

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0815 | -.0340 | .2229 | .6250 | .5942 | .5861 | .5994 | .0142 | |
| .010 | -.0823 | -.0353 | .1690 | .1342 | .0761 | .1150 | .1802 | | |
| .020 | -.0738 | -.0434 | .1213 | .0339 | .0458 | .0299 | .0308 | .0038 | |
| .040 | | -.0267 | .0376 | | | | | | |
| .050 | -.0728 | | | -.0139 | -.0005 | -.0114 | -.0036 | | |
| .069 | | | | | | | | -.0129 | |
| .086 | | | | -.0346 | | | | | |
| .091 | | | .0016 | | | | | | |
| .096 | | .0101 | | | | | | | |
| .094 | -.0078 | | | | | | | | |
| .150 | | | | -.0735 | -.0475 | -.0137 | -.0143 | | |
| .157 | | | | | | | | -.0189 | |
| .163 | | .0548 | | | | | | | |
| .177 | | | -.0007 | | | | | | |
| .229 | -.0179 | | | | | | | | |
| .246 | | .0165 | | | | | | | |
| .250 | | | | -.0307 | -.0595 | -.0332 | -.0104 | | |
| .274 | | | .0103 | | | | | | |

ARC97-019 1A6. LVAP(ALL+R SCALED) LEFT WING BOT. (RETL37)

ALPHAO( 5) = 1.931 BETAO ( 3) = 1.934

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | -.0162 | |
| .352 | .0000 | | | | | | | | |
| .390 | | .0179 | | | | | | | |
| .400 | | | | .0966 | -.0361 | | -.0256 | | |
| .402 | | | .1396 | | | | | | |
| .418 | | | | | | | | | -.0428 |
| .497 | .0320 | | | | | | | | |
| .503 | | | | | | | | -.0280 | |
| .550 | | | | .1404 | .1009 | | | | |
| .565 | | | .1319 | | | | | | |
| .600 | | | | | | | -.0486 | | |
| .637 | | .1273 | | | | | | | |
| .650 | | | | | | .0513 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1801 | | | | |
| .725 | | | | .1925 | | | | | |
| .730 | | | | | | | | | -.0917 |
| .750 | | | | | | .0439 | -.1202 | | |
| .760 | | | .0569 | | | | | | |
| .775 | | | | .2954 | .2989 | | | | |
| .798 | | -.0081 | | | | | | | |
| .808 | | | .1526 | | | | | | |
| .834 | -.1180 | | | | | | | | |
| .839 | | -.0064 | | | | | | | |
| .850 | | | | .1987 | .2553 | .0527 | | | |
| .857 | | | .0566 | | | | | | |
| .862 | | | | | | | | -.1059 | |
| .865 | -.0920 | | | | | | | | |
| .879 | | -.0314 | | | | | | | |
| .900 | -.0893 | | | .0861 | | | -.1128 | | |
| .905 | | | -.0384 | | | | | | |
| .919 | | -.0624 | | | | | | | |
| .950 | | | | -.0058 | .0513 | .0099 | | | |
| .953 | | | -.0941 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0827 | | | | | | | | |
| 1.000 | | | -.1621 | | -.1460 | | -.1550 | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHA0( 5) = 1.943 BETA0 ( 4) = 6.065

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1149 | -.1036 | .1002 | .4701 | .4520 | .4569 | .4946 | -.0228 | |
| .010 | -.1101 | -.0976 | .1260 | .0872 | .0281 | .0685 | .1261 | | |
| .020 | -.1074 | -.0839 | .1173 | .0126 | .0134 | -.0029 | -.0054 | -.0248 | |
| .040 | | -.0769 | .0656 | | | | | | |
| .050 | -.1101 | | | -.0264 | -.0296 | -.0329 | -.0341 | | |
| .069 | | | | | | | | -.0353 | |
| .080 | | | | -.0564 | | | | | |
| .081 | | | -.0191 | | | | | | |
| .086 | | -.0314 | | | | | | | |
| .094 | -.0905 | | | | | | | | |
| .150 | | | | -.0676 | -.0632 | -.0249 | -.0307 | | |
| .157 | | | | | | | | -.0343 | |
| .163 | | .0371 | | | | | | | |
| .177 | | | -.0462 | | | | | | |
| .229 | -.0682 | | | | | | | | |
| .246 | | -.0178 | | | | | | | |
| .250 | | | | -.0016 | -.0586 | -.0388 | -.0188 | | |
| .274 | | | .0322 | | | | | | |
| .345 | | | | | | | | -.0167 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0616 | | | | | | | |
| .400 | | | | .1598 | .1501 | | .0063 | | |
| .402 | | | .1433 | | | | | | |
| .418 | | | | | | | | | -.0632 |
| .497 | .0127 | | | | | | | | |
| .503 | | | | | | | | -.0218 | |
| .550 | | | | .1866 | .2046 | | | | |
| .565 | | | .1373 | | | | | | |
| .600 | | | | | | | .0691 | | |
| .637 | | .1029 | | | | | | | |
| .650 | | | | | | .1535 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1200 | | | | |
| .725 | | | | .0519 | | | | | |
| .730 | | | | | | | | | -.0980 |
| .750 | | | | | | .0398 | .0292 | | |
| .760 | | | -.0545 | | | | | | |
| .775 | | | | .1168 | .2449 | | | | |
| .799 | | -.0711 | | | | | | | |
| .808 | | | .0039 | | | | | | |
| .834 | -.1101 | | | | | | | | |
| .839 | | -.0411 | | | | | | | |
| .850 | | | | .0198 | .0811 | .0068 | | | |
| .857 | | | -.0285 | | | | | | |
| .862 | | | | | | | | -.0872 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 5) = 1.943 BETAO ( 4) = 6.065

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.0831 | | | | | | | | |
| .879 | | -.0848 | | | | | | | |
| .900 | -.0996 | | | -.0506 | | | -.0228 | | |
| .905 | | | -.0962 | | | | | | |
| .919 | | -.1218 | | | | | | | |
| .950 | | | | -.1036 | -.0861 | -.0715 | | | |
| .953 | | | -.1429 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0796 | | | | | | | | |
| 1.000 | | | -.1736 | | -.1648 | | -.1550 | | |

ALPHAO( 6) = 4.018 BETAO ( 1) = -6.417

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0351 | .0855 | .4478 | .9331 | .9110 | .9167 | .9033 | .1992 | |
| .010 | .0340 | .0951 | .3689 | .3045 | .2518 | .3491 | .4188 | | |
| .020 | .0628 | .0712 | .3039 | .1649 | .2406 | .2445 | .2190 | .1881 | |
| .040 | | .0596 | .1304 | | | | | | |
| .050 | .0615 | | | .0971 | .1691 | .1770 | .1895 | | |
| .069 | | | | | | | | .1585 | |
| .080 | | | | .0719 | | | | | |
| .081 | | | .1350 | | | | | | |
| .086 | | .1472 | | | | | | | |
| .094 | .0980 | | | | | | | | |
| .150 | | | | .0637 | .1043 | .1383 | .1654 | | |
| .157 | | | | | | | | .1424 | |
| .163 | | .1210 | | | | | | | |
| .177 | | | .0233 | | | | | | |
| .229 | -.0098 | | | | | | | | |
| .245 | | .0410 | | | | | | | |
| .250 | | | | .0650 | .0924 | .1279 | .1505 | | |
| .274 | | | .0597 | | | | | | |
| .345 | | | | | | | | .1340 | |
| .382 | .0000 | | | | | | | | |
| .390 | | .0854 | | | | | | | |
| .400 | | | | .0529 | .0911 | | .1248 | | |
| .402 | | | .0425 | | | | | | |
| .418 | | | | | | | | | .0781 |
| .497 | .0555 | | | | | | | | |
| .503 | | | | | | | | .1065 | |
| .550 | | | | .0778 | .0987 | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 8) = 4.018 BETAO ( 1) = -8.417

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .2338 | | | | | | |
| .600 | | | | | | | .0894 | | |
| .637 | | .2222 | | | | | | | |
| .650 | | | | | | .0894 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1508 | | | | |
| .725 | | | | .3861 | | | | | |
| .730 | | | | | | | | | -.0284 |
| .750 | | | | | | -.0258 | -.0274 | | |
| .760 | | | .3855 | | | | | | |
| .775 | | | | .4421 | .3091 | | | | |
| .798 | | .4002 | | | | | | | |
| .809 | | | .4189 | | | | | | |
| .834 | .1067 | | | | | | | | |
| .839 | | .3206 | | | | | | | |
| .850 | | | | .4316 | .3681 | -.0774 | | | |
| .857 | | | .3108 | | | | | | |
| .862 | | | | | | | | -.0684 | |
| .865 | .1940 | | | | | | | | |
| .879 | | .1914 | | | | | | | |
| .900 | .1318 | | | .2902 | | | -.1046 | | |
| .905 | | | .1586 | | | | | | |
| .919 | | .1288 | | | | | | | |
| .950 | | | | .1572 | .2190 | -.0138 | | | |
| .953 | | | .0621 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .985 | -.0429 | | | | | | | | |
| 1.000 | | | -.1117 | | -.1688 | | -.1352 | | |

ALPHAO( 8) = 4.022 BETAO ( 2) = -4.381

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0306 | .0383 | .3937 | .8824 | .8525 | .8500 | .8299 | .1631 | |
| .010 | -.0320 | .0407 | .3228 | .2764 | .2189 | .2061 | .3721 | | |
| .020 | -.0263 | .0287 | .2641 | .1467 | .2116 | .2057 | .1857 | .1527 | |
| .040 | | .0254 | .1474 | | | | | | |
| .050 | .0906 | | | .0825 | .1391 | .1456 | .1599 | | |
| .069 | | | | | | | | .1252 | |
| .080 | | | | .0667 | | | | | |
| .081 | | | .0954 | | | | | | |
| .086 | | .0994 | | | | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHA0( 6) = 4.022 BETA0 ( 2) = -4 361

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | .0642 | | | | | | | | |
| .150 | | | | .0353 | .0781 | .1110 | .1345 | | |
| .157 | | | | | | | | .1094 | |
| .163 | | .1492 | | | | | | | |
| .177 | | | .0460 | | | | | | |
| .229 | .0260 | | | | | | | | |
| .246 | | .0682 | | | | | | | |
| .250 | | | | .0635 | .0649 | .0936 | .1188 | | |
| .274 | | | .0181 | | | | | | |
| .345 | | | | | | | | .0983 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0460 | | | | | | | |
| .400 | | | | .0327 | .0715 | | .0966 | | |
| .402 | | | .0211 | | | | | | |
| .418 | | | | | | | | | .0447 |
| .497 | .0149 | | | | | | | | |
| .503 | | | | | | | | .0758 | |
| .550 | | | | .1689 | .0646 | | | | |
| .565 | | | .2064 | | | | | | |
| .600 | | | | | | | .0657 | | |
| .637 | | .2139 | | | | | | | |
| .650 | | | | | | .0681 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2621 | | | | |
| .725 | | | | .3632 | | | | | |
| .739 | | | | | | | | | -.0516 |
| .750 | | | | | | -.0411 | -.0454 | | |
| .760 | | | .3692 | | | | | | |
| .775 | | | | .4116 | .3317 | | | | |
| .798 | | .3232 | | | | | | | |
| .808 | | | .4559 | | | | | | |
| .834 | .0273 | | | | | | | | |
| .839 | | .2308 | | | | | | | |
| .850 | | | | .3517 | .3471 | .0158 | | | |
| .857 | | | .2923 | | | | | | |
| .862 | | | | | | | | -.0814 | |
| .865 | .0663 | | | | | | | | |
| .879 | | .1099 | | | | | | | |
| .900 | .0514 | | | .2404 | | | -.1190 | | |
| .905 | | | .1189 | | | | | | |
| .919 | | .0105 | | | | | | | |
| .950 | | | | .1341 | .1771 | .0109 | | | |
| .953 | | | .0198 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .955 | -.0546 | | | | | | | | |

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

ARC97-019 (A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 6) = 4.022 BETAO ( 2) = -4.361

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1341 | | -.1730 | | -.1401 | | |

ALPHAO( 6) = 4.025 BETAO ( 3) = -.168

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0711 | -.0208 | .2964 | .7371 | .6916 | .6961 | .6977 | .0898 | |
| .010 | -.0579 | -.0036 | .2649 | .2154 | .1537 | .2172 | .2864 | | |
| .020 | -.0542 | .0435 | .2284 | .1040 | .1454 | .1269 | .1202 | .0891 | |
| .040 | | .0707 | .1157 | | | | | | |
| .050 | .0064 | | | .0404 | .0780 | .0770 | .0938 | | |
| .069 | | | | | | | | .0700 | |
| .080 | | | | .0132 | | | | | |
| .081 | | | .0200 | | | | | | |
| .086 | | .0243 | | | | | | | |
| .094 | -.0200 | | | | | | | | |
| .150 | | | | -.0252 | .0221 | .0526 | .0720 | | |
| .157 | | | | | | | | .0589 | |
| .163 | | .0913 | | | | | | | |
| .177 | | | .0256 | | | | | | |
| .229 | .0329 | | | | | | | | |
| .246 | | .0458 | | | | | | | |
| .250 | | | | .0066 | .0082 | .0385 | .0649 | | |
| .274 | | | .0253 | | | | | | |
| .345 | | | | | | | | .0512 | |
| .352 | .0000 | | | | | | | | |
| .390 | | .0087 | | | | | | | |
| .400 | | | | .0250 | .0111 | | .0471 | | |
| .402 | | | .1071 | | | | | | |
| .418 | | | | | | | | | -.0151 |
| .497 | .0041 | | | | | | | | |
| .503 | | | | | | | | .0330 | |
| .550 | | | | .1761 | .0649 | | | | |
| .565 | | | .1698 | | | | | | |
| .600 | | | | | | | .0179 | | |
| .637 | | .1776 | | | | | | | |
| .650 | | | | | | .0124 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2515 | | | | |
| .725 | | | | .3219 | | | | | |
| .730 | | | | | | | | | -.0970 |
| .750 | | | | | | .0599 | -.0791 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 6) = 4.025 BETAO ( 3) = -.168

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .2427 | | | | | | |
| .775 | | | | .3812 | .3491 | | | | |
| .798 | | .1769 | | | | | | | |
| .808 | | | .2828 | | | | | | |
| .834 | -.0485 | | | | | | | | |
| .839 | | .1163 | | | | | | | |
| .850 | | | | .2807 | .3012 | .0840 | | | |
| .857 | | | .1565 | | | | | | |
| .862 | | | | | | | | -.1071 | |
| .865 | .0128 | | | | | | | | |
| .879 | | .0316 | | | | | | | |
| .900 | -.0458 | | | .1606 | | | -.1029 | | |
| .905 | | | .0296 | | | | | | |
| .919 | | -.0416 | | | | | | | |
| .950 | | | | .0558 | .1010 | .0385 | | | |
| .953 | | | -.0453 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0779 | | | | | | | | |
| 1.000 | | | -.1683 | | -.1760 | | -.1539 | | |

ALPHAO( 6) = 4.034 BETAO ( 4) = 3.991

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1169 | -.0686 | .1914 | .5751 | .5679 | .5655 | .5932 | .0430 | |
| .010 | -.1176 | -.0480 | .1992 | .1414 | .0934 | .1642 | .2330 | | |
| .020 | -.1093 | -.0344 | .1750 | .0537 | .0844 | .0875 | .0877 | .0470 | |
| .040 | | -.0315 | .0833 | | | | | | |
| .050 | -.0972 | | | .0043 | .0279 | .0433 | .0613 | | |
| .069 | | | | | | | | .0346 | |
| .080 | | | | -.0020 | | | | | |
| .081 | | | .0270 | | | | | | |
| .085 | | -.0106 | | | | | | | |
| .094 | -.0638 | | | | | | | | |
| .150 | | | | -.0128 | -.0005 | .0245 | .0452 | | |
| .157 | | | | | | | | .0252 | |
| .163 | | .0576 | | | | | | | |
| .177 | | | .0005 | | | | | | |
| .229 | -.0330 | | | | | | | | |
| .245 | | .0247 | | | | | | | |
| .250 | | | | .0033 | .0084 | .0225 | .0423 | | |
| .274 | | | .0164 | | | | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 6) = 4.034 BETAO ( 4) = 3.991

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .0185 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0568 | | | | | | | |
| .400 | | | | .1846 | .1091 | | .0306 | | |
| .402 | | | .1700 | | | | | | |
| .418 | | | | | | | | | -.0615 |
| .497 | .0209 | | | | | | | | |
| .503 | | | | | | | | .0044 | |
| .550 | | | | .2285 | .2330 | | | | |
| .565 | | | .2068 | | | | | | |
| .600 | | | | | | | .0410 | | |
| .637 | | .1769 | | | | | | | |
| .650 | | | | | | .2002 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2664 | | | | |
| .725 | | | | .2304 | | | | | |
| .730 | | | | | | | | | -.1349 |
| .750 | | | | | | .1540 | .0379 | | |
| .760 | | | .0661 | | | | | | |
| .775 | | | | .2795 | .3970 | | | | |
| .798 | | -.0100 | | | | | | | |
| .808 | | | .0883 | | | | | | |
| .834 | -.1277 | | | | | | | | |
| .839 | | .0042 | | | | | | | |
| .850 | | | | .1228 | .2035 | .0780 | | | |
| .857 | | | .0002 | | | | | | |
| .862 | | | | | | | | -.0833 | |
| .865 | -.0902 | | | | | | | | |
| .879 | | -.0332 | | | | | | | |
| .900 | -.0735 | | | .0173 | | | .0436 | | |
| .905 | | | -.0720 | | | | | | |
| .919 | | -.0931 | | | | | | | |
| .950 | | | | -.0624 | -.0232 | -.0023 | | | |
| .953 | | | -.1137 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0868 | | | | | | | | |
| 1.000 | | | -.1808 | | -.1575 | | -.1513 | | |

ARC97-019 IA81 LVAP(ALLML SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 8) = 4.038 BETAO ( 5) = 8.084

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1338 | -.1197 | .1112 | .4985 | .4931 | .5257 | .5371 | .0251 | |
| .010 | -.1347 | -.1101 | .1579 | .1365 | .0815 | .1624 | .2101 | | |
| .020 | -.1263 | -.0671 | .1550 | .0885 | .0907 | .0944 | .0777 | .0338 | |
| .040 | | -.0515 | .0871 | | | | | | |
| .050 | -.1220 | | | .0119 | .0299 | .0450 | .0543 | | |
| .069 | | | | | | | | .0234 | |
| .080 | | | | -.0218 | | | | | |
| .081 | | | -.0003 | | | | | | |
| .088 | | -.0201 | | | | | | | |
| .094 | -.0952 | | | | | | | | |
| .150 | | | | -.0319 | -.0054 | .0232 | .0392 | | |
| .157 | | | | | | | | .0181 | |
| .163 | | .0491 | | | | | | | |
| .177 | | | -.0029 | | | | | | |
| .229 | -.0407 | | | | | | | | |
| .246 | | .0130 | | | | | | | |
| .250 | | | | .0845 | .0190 | .0125 | .0362 | | |
| .274 | | | .0898 | | | | | | |
| .345 | | | | | | | | .0295 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1038 | | | | | | | |
| .400 | | | | .2450 | .2614 | | .0676 | | |
| .402 | | | .1884 | | | | | | |
| .418 | | | | | | | | | -.0821 |
| .497 | .0694 | | | | | | | | |
| .503 | | | | | | | | .0311 | |
| .550 | | | | .1819 | .2023 | | | | |
| .565 | | | .1665 | | | | | | |
| .600 | | | | | | | .1995 | | |
| .637 | | .1495 | | | | | | | |
| .650 | | | | | | .1783 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1794 | | | | |
| .725 | | | | .0979 | | | | | |
| .730 | | | | | | | | | -.1779 |
| .750 | | | | | | .0743 | .0469 | | |
| .760 | | | -.0277 | | | | | | |
| .775 | | | | .1368 | .2595 | | | | |
| .798 | | -.0467 | | | | | | | |
| .808 | | | .0342 | | | | | | |
| .834 | -.1059 | | | | | | | | |
| .839 | | -.0203 | | | | | | | |
| .850 | | | | .0323 | .0963 | .0262 | | | |
| .857 | | | -.0241 | | | | | | |
| .862 | | | | | | | | -.0560 | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 6) = 4.038 BETAO ( 5) = 6.064

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.0805 | | | | | | | | |
| .879 | | -.0781 | | | | | | | |
| .900 | -.0959 | | | -.0440 | | | -.0003 | | |
| .905 | | | -.0956 | | | | | | |
| .919 | | -.1227 | | | | | | | |
| .950 | | | | -.1002 | -.0759 | -.0591 | | | |
| .953 | | | -.1449 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0912 | | | | | | | | |
| 1.000 | | | -.1849 | | -.1655 | | -.1640 | | |

ALPHAO( 7) = 6.134 BETAO ( 1) = -4.334

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0145 | .0484 | .4069 | .9055 | .8758 | .8548 | .8366 | .1958 | |
| .010 | .0704 | .0706 | .3681 | .3404 | .3079 | .3932 | .4490 | | |
| .020 | .0791 | .0732 | .3141 | .2233 | .3344 | .3089 | .2825 | .2102 | |
| .040 | | .0845 | .2174 | | | | | | |
| .050 | .0243 | | | .1701 | .1984 | .2210 | .2426 | | |
| .069 | | | | | | | | .1884 | |
| .080 | | | | .1370 | | | | | |
| .081 | | | .1201 | | | | | | |
| .086 | | .0997 | | | | | | | |
| .094 | .0316 | | | | | | | | |
| .150 | | | | .0642 | .1376 | .1762 | .2165 | | |
| .157 | | | | | | | | .1700 | |
| .163 | | .1693 | | | | | | | |
| .177 | | | .0724 | | | | | | |
| .229 | .0952 | | | | | | | | |
| .246 | | .0758 | | | | | | | |
| .250 | | | | .0927 | .1094 | .1588 | .1901 | | |
| .274 | | | .0432 | | | | | | |
| .345 | | | | | | | | .1465 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0697 | | | | | | | |
| .400 | | | | .0645 | .1102 | | .1562 | | |
| .402 | | | .0562 | | | | | | |
| .418 | | | | | | | | | .0105 |
| .497 | .0370 | | | | | | | | |
| .503 | | | | | | | | .1190 | |
| .550 | | | | .3571 | .1109 | | | | |

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 7) = 6.134 BETAO ( 1) = -4.334

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .3247 | | | | | | |
| .600 | | | | | | | .1076 | | |
| .637 | | .2837 | | | | | | | |
| .650 | | | | | | .1126 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3345 | | | | |
| .725 | | | | .3541 | | | | | |
| .730 | | | | | | | | | -.1237 |
| .750 | | | | | | .0214 | -.0186 | | |
| .760 | | | .3045 | | | | | | |
| .775 | | | | .4321 | .4269 | | | | |
| .798 | | .2867 | | | | | | | |
| .808 | | | .3856 | | | | | | |
| .834 | .0316 | | | | | | | | |
| .839 | | .2028 | | | | | | | |
| .850 | | | | .3459 | .3476 | .1511 | | | |
| .857 | | | .2211 | | | | | | |
| .862 | | | | | | | | -.0784 | |
| .865 | .0851 | | | | | | | | |
| .879 | | .0738 | | | | | | | |
| .900 | .0079 | | | .2242 | | | -.0940 | | |
| .905 | | | .0714 | | | | | | |
| .919 | | -.0301 | | | | | | | |
| .950 | | | | .1088 | .1423 | .1029 | | | |
| .953 | | | -.0094 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0732 | | | | | | | | |
| 1.000 | | | -.1555 | | -.1931 | | -.1339 | | |

ALPHAO( 7) = 6.130 BETAO ( 2) = -2.240

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0323 | .0223 | .3700 | .8332 | .7986 | .8076 | .7900 | .1565 | |
| .010 | .0190 | .0515 | .3604 | .3003 | .2605 | .3600 | .4129 | | |
| .020 | .0716 | .0585 | .3123 | .1858 | .2923 | .2656 | .2494 | .1726 | |
| .040 | | .0588 | .1732 | | | | | | |
| .050 | .0655 | | | .1196 | .1719 | .1927 | .2082 | | |
| .069 | | | | | | | | .1538 | |
| .080 | | | | .0914 | | | | | |
| .081 | | | .0722 | | | | | | |
| .086 | | .0906 | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 7) = 6.130 BETAO ( 2) = -2.240

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0064 | | | | | | | | |
| .150 | | | | .0520 | .1005 | .1446 | .1807 | | |
| .157 | | | | | | | | .1401 | |
| .163 | | .1019 | | | | | | | |
| .177 | | | .0563 | | | | | | |
| .229 | .0588 | | | | | | | | |
| .246 | | .0672 | | | | | | | |
| .250 | | | | .0579 | .0816 | .1272 | .1592 | | |
| .274 | | | .0381 | | | | | | |
| .345 | | | | | | | | .1250 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0218 | | | | | | | |
| .400 | | | | .0668 | .0923 | | .1297 | | |
| .402 | | | .0172 | | | | | | |
| .418 | | | | | | | | | -.0151 |
| .497 | -.0178 | | | | | | | | |
| .503 | | | | | | | | .0988 | |
| .550 | | | | .3183 | .0824 | | | | |
| .565 | | | .3024 | | | | | | |
| .600 | | | | | | | .0904 | | |
| .637 | | .3121 | | | | | | | |
| .650 | | | | | | .0847 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3099 | | | | |
| .725 | | | | .3832 | | | | | |
| .730 | | | | | | | | | -.1459 |
| .750 | | | | | | .0536 | -.0283 | | |
| .760 | | | .2832 | | | | | | |
| .775 | | | | .4775 | .4271 | | | | |
| .798 | | .2403 | | | | | | | |
| .808 | | | .3282 | | | | | | |
| .834 | .0023 | | | | | | | | |
| .839 | | .1479 | | | | | | | |
| .850 | | | | .3435 | .3764 | .1587 | | | |
| .857 | | | .1648 | | | | | | |
| .862 | | | | | | | | -.0859 | |
| .865 | .0512 | | | | | | | | |
| .879 | | .0298 | | | | | | | |
| .900 | .0056 | | | .2179 | | | -.0903 | | |
| .905 | | | .0304 | | | | | | |
| .919 | | -.0520 | | | | | | | |
| 950 | | | | .0909 | .1391 | .0877 | | | |
| .953 | | | -.0404 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0821 | | | | | | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 7) = 6.130 BETAO ( 2) = -2.240

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BM | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CM | | | | | | | | | |
| 1.000 | | | -.1670 | | -.1925 | | -.1450 | | |

ALPHAO( 7) = 6.130 BETAO ( 3) = -.154

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BM | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CM | | | | | | | | | |
| .000 | -.0603 | -.0181 | .3177 | .7823 | .7231 | .7333 | .7251 | .1273 | |
| .010 | -.0068 | .0124 | .3253 | .2677 | .2251 | .3203 | .3755 | | |
| .020 | -.0011 | .0502 | .2839 | .1622 | .2515 | .2328 | .2236 | .1474 | |
| .040 | | .0604 | .1475 | | | | | | |
| .050 | .0371 | | | .0928 | .1404 | .1545 | .1818 | | |
| .069 | | | | | | | | .1297 | |
| .080 | | | | .0568 | | | | | |
| .081 | | | .0445 | | | | | | |
| .086 | | .0449 | | | | | | | |
| .094 | .0252 | | | | | | | | |
| .150 | | | | .0181 | .0699 | .1135 | .1530 | | |
| .157 | | | | | | | | .1179 | |
| .163 | | .0323 | | | | | | | |
| .177 | | | .0521 | | | | | | |
| .229 | .0321 | | | | | | | | |
| .246 | | .0834 | | | | | | | |
| .250 | | | | .0394 | .0570 | .0978 | .1330 | | |
| .274 | | | .0786 | | | | | | |
| .345 | | | | | | | | .1018 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0348 | | | | | | | |
| .400 | | | | .0695 | .0602 | | .1099 | | |
| .412 | | | .0875 | | | | | | |
| .418 | | | | | | | | | -.0484 |
| .487 | .0160 | | | | | | | | |
| .503 | | | | | | | | .0757 | |
| .550 | | | | .3410 | .2568 | | | | |
| .565 | | | .2878 | | | | | | |
| .600 | | | | | | | .0747 | | |
| .637 | | .2873 | | | | | | | |
| .650 | | | | | | .2132 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3438 | | | | |
| .725 | | | | .3263 | | | | | |
| .730 | | | | | | | | | -.1887 |
| .750 | | | | | | .1801 | -.0384 | | |

ARC97-018 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 7) = 8.130 BETAO ( 3) = -.154

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .780 | | | .8348 | | | | | | |
| .775 | | | | .4022 | .4467 | | | | |
| .790 | | .1847 | | | | | | | |
| .800 | | | .2090 | | | | | | |
| .834 | -.0181 | | | | | | | | |
| .839 | | .1023 | | | | | | | |
| .850 | | | | .2410 | .3138 | .1870 | | | |
| .857 | | | .1187 | | | | | | |
| .862 | | | | | | | | -.0913 | |
| .885 | .0421 | | | | | | | | |
| .878 | | .0083 | | | | | | | |
| .900 | -.0418 | | | .1238 | | | .0468 | | |
| .905 | | | -.0088 | | | | | | |
| .819 | | -.0721 | | | | | | | |
| .950 | | | | .0474 | .0762 | .0878 | | | |
| .953 | | | -.0780 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .985 | -.0838 | | | | | | | | |
| 1.000 | | | -.1808 | | -.1844 | | -.1388 | | |

ALPHAO( 7) = 8.134 BETAO ( 4) = 1.951

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1071 | -.0378 | .2885 | .0888 | .0828 | .0713 | .0760 | .1016 | |
| .010 | -.0850 | -.0187 | .2885 | .2191 | .1774 | .2877 | .3472 | | |
| .020 | -.0818 | .0088 | .2887 | .1889 | .1878 | .2088 | .2031 | .1834 | |
| .040 | | .0380 | .1188 | | | | | | |
| .080 | -.0328 | | | .0998 | .1011 | .1381 | .1817 | | |
| .088 | | | | | | | | .1110 | |
| .080 | | | | .0338 | | | | | |
| .081 | | | .0371 | | | | | | |
| .088 | | .0250 | | | | | | | |
| .084 | -.0282 | | | | | | | | |
| .150 | | | | .0487 | .0488 | .0858 | .1348 | | |
| .157 | | | | | | | | .0883 | |
| .163 | | .1184 | | | | | | | |
| .177 | | | .0480 | | | | | | |
| .228 | .0248 | | | | | | | | |
| .248 | | .0817 | | | | | | | |
| .250 | | | | .0728 | .0868 | .0858 | .1184 | | |
| .274 | | | .0487 | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SCALED) LEFT WING BOT. (RETL37)

ALPHAO( 7) = 8.134 BETAO ( 4) = 1.951

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .0805 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0183 | | | | | | | |
| .400 | | | | .2428 | .0936 | | .0993 | | |
| .402 | | | .2244 | | | | | | |
| .413 | | | | | | | | | -.0731 |
| .497 | .0293 | | | | | | | | |
| .503 | | | | | | | | .0587 | |
| .550 | | | | .3247 | .3289 | | | | |
| .565 | | | .2853 | | | | | | |
| .600 | | | | | | | .0946 | | |
| .637 | | .2590 | | | | | | | |
| .650 | | | | | | .3134 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3132 | | | | |
| .725 | | | | .2874 | | | | | |
| .730 | | | | | | | | | -.1853 |
| .750 | | | | | | .1681 | .1033 | | |
| .760 | | | .1433 | | | | | | |
| .775 | | | | .3362 | .3974 | | | | |
| .798 | | .1029 | | | | | | | |
| .808 | | | .1764 | | | | | | |
| .834 | -.0840 | | | | | | | | |
| .839 | | .0391 | | | | | | | |
| .850 | | | | .1837 | .2219 | .1383 | | | |
| .857 | | | .0480 | | | | | | |
| .862 | | | | | | | | -.0510 | |
| .865 | -.0252 | | | | | | | | |
| .879 | | -.0462 | | | | | | | |
| .900 | -.0800 | | | .0671 | | | .1143 | | |
| .905 | | | -.0539 | | | | | | |
| .919 | | -.1071 | | | | | | | |
| .950 | | | | -.0212 | .0323 | .0181 | | | |
| .953 | | | -.1132 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0848 | | | | | | | | |
| 1.000 | | | -.1883 | | -.1873 | | -.1325 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 7) = 6.135 BETAO ( 5) = 3.996

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1323 | -.0750 | .2415 | .6046 | .6106 | .6274 | .6286 | .0739 | |
| .010 | -.1323 | -.0448 | .2657 | .2126 | .1902 | .2822 | .3235 | | |
| .020 | -.1287 | .0066 | .2206 | .1366 | .2024 | .2035 | .1920 | .0991 | |
| .040 | | .0119 | .0907 | | | | | | |
| .050 | -.0828 | | | .0911 | .0976 | .1275 | .1525 | | |
| .069 | | | | | | | | .0921 | |
| .080 | | | | .0612 | | | | | |
| .081 | | | .0814 | | | | | | |
| .086 | | .0000 | | | | | | | |
| .094 | -.0349 | | | | | | | | |
| .150 | | | | .0153 | .0698 | .1040 | .1328 | | |
| .157 | | | | | | | | .0850 | |
| .163 | | .0826 | | | | | | | |
| .177 | | | .0277 | | | | | | |
| .229 | -.0279 | | | | | | | | |
| .246 | | .0439 | | | | | | | |
| .250 | | | | .0412 | .0671 | .1010 | .1209 | | |
| .274 | | | .0572 | | | | | | |
| .345 | | | | | | | | .0749 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1227 | | | | | | | |
| .400 | | | | .3339 | .2933 | | .1115 | | |
| .402 | | | .2591 | | | | | | |
| .418 | | | | | | | | | -.1053 |
| .497 | .0899 | | | | | | | | |
| .503 | | | | | | | | .0689 | |
| .550 | | | | .2238 | .2749 | | | | |
| .565 | | | .2014 | | | | | | |
| .600 | | | | | | | .2377 | | |
| .637 | | .1918 | | | | | | | |
| .650 | | | | | | .2924 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2877 | | | | |
| .725 | | | | .2392 | | | | | |
| 730 | | | | | | | | | -.2140 |
| .750 | | | | | | .1482 | .1223 | | |
| .760 | | | .2381 | | | | | | |
| .775 | | | | .2457 | .3880 | | | | |
| .798 | | .0257 | | | | | | | |
| .808 | | | .0943 | | | | | | |
| .834 | -.1129 | | | | | | | | |
| .839 | | -.0087 | | | | | | | |
| .850 | | | | .1065 | .1717 | .0538 | | | |
| .057 | | | -.0081 | | | | | | |
| .862 | | | | | | | | .0010 | |

ARC9[illegible]-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL37)

ALPHAO( 7) = 8.135 BETAO ( 5) = 3.996

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .885 | -.0671 | | | | | | | | |
| .879 | | -.0511 | | | | | | | |
| .900 | -.0781 | | | .0029 | | | .0380 | | |
| .905 | | | -.0844 | | | | | | |
| .919 | | -.0987 | | | | | | | |
| .950 | | | | -.0722 | -.0422 | -.0225 | | | |
| .953 | | | -.1268 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0936 | | | | | | | | |
| 1.000 | | | -.1958 | | -.1674 | | -.1540 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.500 RN/FT = 2.500
ELV-IB = 8.000 ELV-OB = -4.000
RUDDER = .000 SPDBRK = .000

ALPHAO( 1) = -6.289 BETAO ( 1) = -3.981

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0833 | .0374 | .4407 | .8691 | .7871 | .7833 | .7910 | -.0135 | |
| .010 | .0448 | -.0117 | .3015 | .1848 | .1051 | .1592 | .1861 | | |
| .020 | .0194 | .0317 | .2295 | .0815 | .0511 | .0255 | .0254 | -.0499 | |
| .040 | | .0928 | .0801 | | | | | | |
| .050 | .0215 | | | -.0130 | .0053 | -.0210 | -.0189 | | |
| .069 | | | | | | | | -.0546 | |
| .080 | | | | -.0357 | | | | | |
| .081 | | | .0985 | | | | | | |
| .086 | | .1765 | | | | | | | |
| .094 | .0069 | | | | | | | | |
| .130 | | | | -.0119 | -.0247 | -.0025 | -.0329 | | |
| .157 | | | | | | | | -.0507 | |
| .163 | | .1674 | | | | | | | |
| .177 | | | .0013 | | | | | | |
| .229 | .0128 | | | | | | | | |
| .246 | | .0457 | | | | | | | |
| .250 | | | | -.0168 | -.0348 | -.0284 | -.0142 | | |
| .274 | | | .0229 | | | | | | |
| .345 | | | | | | | | -.0281 | |
| .382 | .0000 | | | | | | | | |
| .390 | | .0058 | | | | | | | |
| .400 | | | | -.0196 | -.0347 | | -.0398 | | |
| .402 | | | .0077 | | | | | | |
| .418 | | | | | | | | | -.0841 |
| .497 | .0534 | | | | | | | | |
| .503 | | | | | | | | -.0342 | |
| .550 | | | | .0839 | -.0235 | | | | |
| .565 | | | .1088 | | | | | | |
| .600 | | | | | | | -.0514 | | |
| .637 | | .1262 | | | | | | | |
| .650 | | | | | | -.0847 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0228 | | | | |
| .725 | | | | .0374 | | | | | |
| .730 | | | | | | | | | -.1377 |
| .750 | | | | | | -.1094 | -.1104 | | |
| .760 | | | .0582 | | | | | | |
| .775 | | | | .1140 | .1221 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 1) = -6.289 BETAO ( 1) = -3.981

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .798 | | .1004 | | | | | | | |
| .808 | | | .1398 | | | | | | |
| .834 | .0151 | | | | | | | | |
| .839 | | .1029 | | | | | | | |
| .850 | | | | .1918 | .1186 | -.1343 | | | |
| .857 | | | .1599 | | | | | | |
| .862 | | | | | | | | -.0768 | |
| .865 | .0548 | | | | | | | | |
| .879 | | .0309 | | | | | | | |
| .900 | -.0411 | | | .1791 | | | -.1501 | | |
| .905 | | | .1631 | | | | | | |
| .919 | | .0291 | | | | | | | |
| .950 | | | | .1245 | .0927 | -.1157 | | | |
| .953 | | | .0932 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | .0042 | | | | | | | | |
| 1.000 | | | -.0598 | | -.0700 | | -.1354 | | |

ALPHAO( 1) = -6.280 BETAO ( 2) = -1.881

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0838 | -.0024 | .3894 | .7271 | .7015 | .6865 | .7026 | -.0432 | |
| .010 | .0340 | -.0335 | .2691 | .1237 | .0626 | .1184 | .1403 | | |
| .020 | .0115 | .0403 | .2084 | .0248 | .0161 | -.0062 | -.0057 | -.0802 | |
| .040 | | .0728 | .0880 | | | | | | |
| .050 | .0598 | | | -.0197 | -.0205 | -.0484 | -.0481 | | |
| .069 | | | | | | | | -.0841 | |
| .080 | | | | -.0323 | | | | | |
| .081 | | | .0504 | | | | | | |
| .088 | | .1449 | | | | | | | |
| .094 | .0029 | | | | | | | | |
| .150 | | | | -.0326 | -.0441 | -.0248 | -.0591 | | |
| .157 | | | | | | | | -.0802 | |
| .183 | | .1532 | | | | | | | |
| .177 | | | -.0304 | | | | | | |
| .229 | .0151 | | | | | | | | |
| .246 | | .0822 | | | | | | | |
| .250 | | | | -.0529 | -.0588 | -.0523 | -.0358 | | |
| .274 | | | -.0025 | | | | | | |
| .345 | | | | | | | | -.0530 | |
| .392 | .0000 | | | | | | | | |

ARC97-019 IA81 LVAR(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 1) = -6.280 BETAO ( 2) = -1.881

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2690 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .390 | | .0191 | | | | | | | |
| .400 | | | | -.0414 | -.0589 | | -.0659 | | |
| .402 | | | -.0138 | | | | | | |
| .418 | | | | | | | | | -.1076 |
| .497 | .0181 | | | | | | | | |
| .503 | | | | | | | | -.0609 | |
| .550 | | | | .0602 | -.0422 | | | | |
| .585 | | | .0437 | | | | | | |
| .600 | | | | | | | -.0741 | | |
| .637 | | .0938 | | | | | | | |
| .650 | | | | | | -.0862 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0041 | | | | |
| .725 | | | | .0081 | | | | | |
| .730 | | | | | | | | | -.1547 |
| .750 | | | | | | -.1236 | -.1259 | | |
| .760 | | | .0483 | | | | | | |
| .775 | | | | .0484 | .0940 | | | | |
| .798 | | .0607 | | | | | | | |
| .808 | | | .1301 | | | | | | |
| .834 | -.0427 | | | | | | | | |
| .839 | | .0374 | | | | | | | |
| .850 | | | | .1811 | .0918 | -.1004 | | | |
| .857 | | | .0874 | | | | | | |
| .862 | | | | | | | | -.0827 | |
| .873 | -.0035 | | | | | | | | |
| .879 | | -.0144 | | | | | | | |
| .900 | -.0744 | | | .1375 | | | -.1570 | | |
| .905 | | | .0798 | | | | | | |
| .919 | | -.0880 | | | | | | | |
| .950 | | | | .0951 | .0518 | -.0872 | | | |
| .953 | | | .0193 | | | | | | |
| .956 | | .0000 | | | | | | | |
| .985 | -.0345 | | | | | | | | |
| 1.000 | | | -.0809 | | -.0854 | | -.1180 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 1) = -6.268 BETAO ( 3) = .215

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0553 | -.0233 | .2964 | .6968 | .5846 | .8091 | .6219 | -.0773 | |
| .010 | .0326 | .0251 | .2051 | .1154 | .0368 | .0848 | .1032 | | |
| .020 | .0176 | .0748 | .1624 | .0097 | -.0028 | -.0312 | -.0293 | -.1048 | |
| .040 | | .0784 | .1018 | | | | | | |
| .050 | .0368 | | | -.0467 | -.0348 | -.0706 | -.0691 | | |
| .069 | | | | | | | | -.1063 | |
| .080 | | | | -.0562 | | | | | |
| .081 | | | .0159 | | | | | | |
| .086 | | .0780 | | | | | | | |
| .094 | -.0034 | | | | | | | | |
| .150 | | | | -.0579 | -.0612 | -.0360 | -.0818 | | |
| .157 | | | | | | | | -.1048 | |
| .163 | | .1059 | | | | | | | |
| .177 | | | .0018 | | | | | | |
| .229 | .0632 | | | | | | | | |
| .246 | | .0587 | | | | | | | |
| .250 | | | | -.0443 | -.0759 | -.0709 | -.0531 | | |
| .274 | | | -.0408 | | | | | | |
| .345 | | | | | | | | -.0720 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0117 | | | | | | | |
| .400 | | | | .0728 | -.0769 | | -.0873 | | |
| .402 | | | .1135 | | | | | | |
| .418 | | | | | | | | | -.1273 |
| .497 | -.0152 | | | | | | | | |
| .503 | | | | | | | | -.0788 | |
| .550 | | | | .0195 | -.0009 | | | | |
| .565 | | | .0462 | | | | | | |
| .600 | | | | | | | -.0927 | | |
| .637 | | .0879 | | | | | | | |
| .650 | | | | | | -.0535 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0090 | | | | -.0082 | | | | |
| .725 | | | | -.0199 | | | | | |
| .730 | | | | | | | | | -.1679 |
| .750 | | | | | | -.0777 | -.1381 | | |
| .760 | | | .0229 | | | | | | |
| .775 | | | | .0177 | .0552 | | | | |
| .798 | | .0115 | | | | | | | |
| .808 | | | .0596 | | | | | | |
| .834 | -.0718 | | | | | | | | |
| .839 | | -.0188 | | | | | | | |
| .850 | | | | .1888 | .0517 | -.0841 | | | |
| .857 | | | .0184 | | | | | | |
| .862 | | | | | | | | -.0752 | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RE .38)

ALPHAO( 1) = -6.268 BETAO ( 3) = .215

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .885 | -.0632 | | | | | | | | |
| .879 | | -.0723 | | | | | | | |
| .900 | -.1035 | | | .1354 | | | -.1406 | | |
| .905 | | | .0215 | | | | | | |
| .919 | | -.1012 | | | | | | | |
| .950 | | | | .0556 | .0263 | -.0826 | | | |
| .953 | | | -.0377 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0185 | | | | | | | | |
| 1.000 | | | -.0947 | | -.0912 | | -.1048 | | |

ALPHAO( 1) = -6.259 BETAO ( 4) = 2.322

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0326 | .0099 | .2416 | .6004 | .5198 | .4758 | .5684 | -.0992 | |
| .010 | .0238 | .0314 | .1556 | .0925 | -.0008 | .0583 | .0706 | | |
| .020 | .0309 | .0652 | .1306 | .0054 | -.0405 | -.0341 | -.0514 | -.1206 | |
| 040 | | .0754 | .0960 | | | | | | |
| .050 | .0078 | | | -.0479 | -.0714 | -.0668 | -.0912 | | |
| .069 | | | | | | | | -.1231 | |
| .080 | | | | -.0639 | | | | | |
| .081 | | | -.0064 | | | | | | |
| .086 | | .0342 | | | | | | | |
| .094 | .0103 | | | | | | | | |
| .130 | | | | -.0807 | -.0902 | -.0439 | -.1030 | | |
| .157 | | | | | | | | -.1238 | |
| .163 | | .0080 | | | | | | | |
| .177 | | | -.0114 | | | | | | |
| .229 | .0491 | | | | | | | | |
| .246 | | .0259 | | | | | | | |
| .250 | | | | -.0531 | -.0887 | -.0891 | -.0849 | | |
| .274 | | | -.0230 | | | | | | |
| .345 | | | | | | | | -.0017 | |
| .382 | .0000 | | | | | | | | |
| .390 | | .0079 | | | | | | | |
| .400 | | | | .0584 | -.0428 | | -.1034 | | |
| .412 | | | .1045 | | | | | | |
| .412 | | | | | | | | | -.1428 |
| .497 | .0138 | | | | | | | | |
| .503 | | | | | | | | -.0988 | |
| .550 | | | | .0180 | .0084 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 1) = -8.259 BETAO ( 4) = 2.322

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .0739 | | | | | | |
| .600 | | | | | | | -.1131 | | |
| .637 | | .0737 | | | | | | | |
| .650 | | | | | | -.0475 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0284 | | | | |
| .725 | | | | .0124 | | | | | |
| .730 | | | | | | | | | -.1796 |
| .750 | | | | | | -.0788 | -.1488 | | |
| .760 | | | -.0099 | | | | | | |
| .775 | | | | .0488 | .0367 | | | | |
| .798 | | -.0344 | | | | | | | |
| .808 | | | .0080 | | | | | | |
| .834 | -.1044 | | | | | | | | |
| .839 | | -.0850 | | | | | | | |
| .850 | | | | .1408 | .1113 | -.0621 | | | |
| .857 | | | -.0452 | | | | | | |
| .862 | | | | | | | | -.0773 | |
| .865 | -.1023 | | | | | | | | |
| .879 | | -.1076 | | | | | | | |
| .900 | -.1144 | | | .0718 | | | -.1241 | | |
| .905 | | | -.0733 | | | | | | |
| .919 | | -.1125 | | | | | | | |
| .950 | | | | -.0057 | .0604 | -.0820 | | | |
| .953 | | | -.0670 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0320 | | | | | | | | |
| 1.000 | | | -.1061 | | -.0937 | | -.0945 | | |

ALPHAO( 1) = -8.250 BETAO ( 5) = 4.389

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0188 | -.0033 | .1884 | .5375 | .4855 | .4080 | .4199 | -.1180 | |
| .010 | .0250 | .0094 | .1517 | .0583 | -.0100 | .0011 | .0116 | | |
| .020 | .0238 | .0185 | .1281 | -.0230 | -.0491 | -.0890 | -.0839 | -.1378 | |
| .040 | | .0153 | .0441 | | | | | | |
| .050 | -.0102 | | | -.0638 | -.0839 | -.1127 | -.1175 | | |
| .069 | | | | | | | | -.1430 | |
| .080 | | | | -.0778 | | | | | |
| .081 | | | -.0074 | | | | | | |
| .086 | | .0082 | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 1) = -6.250 BETAO ( 5) = 4 389

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2980 | .3840 | .4270 | .5340 | .8730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0078 | | | | | | | | |
| .150 | | | | -.0523 | -.1103 | -.0625 | -.1150 | | |
| .157 | | | | | | | | -.1440 | |
| .163 | | .0323 | | | | | | | |
| .177 | | | -.0293 | | | | | | |
| .229 | .0243 | | | | | | | | |
| .246 | | .0049 | | | | | | | |
| .250 | | | | -.0718 | -.1096 | -.1135 | -.0722 | | |
| .274 | | | -.0392 | | | | | | |
| .345 | | | | | | | | -.1147 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0074 | | | | | | | |
| .400 | | | | .0492 | .0018 | | -.1169 | | |
| .402 | | | .1048 | | | | | | |
| .418 | | | | | | | | | -.1593 |
| .497 | .0243 | | | | | | | | |
| .503 | | | | | | | | -.1176 | |
| .550 | | | | .0248 | -.0038 | | | | |
| .565 | | | .0621 | | | | | | |
| .600 | | | | | | | -.1190 | | |
| .637 | | .0521 | | | | | | | |
| .650 | | | | | | -.0378 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0008 | | | | -.0272 | | | | |
| .725 | | | | .0244 | | | | | |
| .730 | | | | | | | | | -.1889 |
| .750 | | | | | | -.0887 | -.1151 | | |
| .760 | | | -.0272 | | | | | | |
| .775 | | | | .0582 | .0635 | | | | |
| .798 | | -.0313 | | | | | | | |
| .808 | | | -.0131 | | | | | | |
| .834 | -.1113 | | | | | | | | |
| .838 | | -.0888 | | | | | | | |
| .850 | | | | .0220 | .0580 | -.0803 | | | |
| .857 | | | -.0874 | | | | | | |
| .862 | | | | | | | | -.0891 | |
| .885 | -.1138 | | | | | | | | |
| .879 | | -.1218 | | | | | | | |
| .900 | -.1166 | | | -.0209 | | | -.1212 | | |
| .905 | | | -.1052 | | | | | | |
| .919 | | -.1152 | | | | | | | |
| .950 | | | | -.0810 | .0053 | -.1099 | | | |
| .953 | | | -.1087 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .985 | -.0410 | | | | | | | | |

ARC87-018 IA81 LVAP(ALUM. SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 1) = -6.850 BETAO ( 5) = 4.388

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2980 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1267 | | -.1016 | | -.1033 | | |

ALPHAO( 2) = -4.232 BETAO ( 1) = -6.045

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2980 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0813 | .0808 | .4788 | .9288 | .8907 | .8717 | .8569 | .0489 | |
| .010 | .0578 | .0029 | .3456 | .2371 | .1617 | .2133 | .2531 | | |
| .020 | .0311 | -.0214 | .2782 | .1090 | .1041 | .0772 | .0793 | .0105 | |
| .040 | | -.0101 | .1207 | | | | | | |
| .050 | -.0062 | | | .0357 | .0569 | .0297 | .0358 | | |
| .069 | | | | | | | | .0009 | |
| .080 | | | | .0127 | | | | | |
| .081 | | | .1157 | | | | | | |
| .086 | | .2173 | | | | | | | |
| .094 | -.0013 | | | | | | | | |
| .150 | | | | .0218 | .0214 | .0376 | .0233 | | |
| .157 | | | | | | | | .0066 | |
| .163 | | .2006 | | | | | | | |
| .177 | | | .0206 | | | | | | |
| .228 | .0222 | | | | | | | | |
| .246 | | .0523 | | | | | | | |
| .250 | | | | .0071 | .0084 | .0294 | .0312 | | |
| .274 | | | .0508 | | | | | | |
| .345 | | | | | | | | .0219 | |
| .382 | .0000 | | | | | | | | |
| .383 | | .0384 | | | | | | | |
| .450 | | | | .0082 | -.0024 | | .0130 | | |
| .402 | | | .0244 | | | | | | |
| .418 | | | | | | | | | -.0122 |
| .487 | .0782 | | | | | | | | |
| .503 | | | | | | | | .0137 | |
| .550 | | | | .0277 | .0108 | | | | |
| .585 | | | .1583 | | | | | | |
| .600 | | | | | | | -.0232 | | |
| .637 | | .1721 | | | | | | | |
| .650 | | | | | | -.0283 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0030 | | | | -.0300 | | | | |
| .725 | | | | .0773 | | | | | |
| .730 | | | | | | | | | -.0738 |
| .750 | | | | | | -.0888 | -.0830 | | |

ARC97-019 IA81 LVA(ALLML SEALED) LEFT WING BOT. (RETL38)

ALPHA0( 2) = -4.239 BETA0 ( 1) = -6.049

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BM | .2990 | .3640 | .4270 | .5340 | .6730 | .7900 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CH | | | | | | | | | |
| .780 | | | .0911 | | | | | | |
| .775 | | | | .1887 | .1484 | | | | |
| .798 | | .1330 | | | | | | | |
| .808 | | | .1693 | | | | | | |
| .834 | .0185 | | | | | | | | |
| .839 | | .1041 | | | | | | | |
| .850 | | | | .2812 | .1480 | -.1198 | | | |
| .857 | | | .3135 | | | | | | |
| .862 | | | | | | | | -.0574 | |
| .865 | .0728 | | | | | | | | |
| .879 | | .0408 | | | | | | | |
| .900 | -.0016 | | | .2500 | | | -.1327 | | |
| .905 | | | .2179 | | | | | | |
| .919 | | .2148 | | | | | | | |
| .950 | | | | .1846 | .1219 | -.1438 | | | |
| .953 | | | .1355 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | .3487 | | | | | | | | |
| 1.000 | | | -.0411 | | -.0834 | | -.1341 | | |

ALPHA0( 2) = -4.224 BETA0 ( 2) = -3.999

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BM | .2990 | .3040 | .4270 | .5340 | .6730 | .7900 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CH | | | | | | | | | |
| .000 | .0988 | .0189 | .4104 | .8547 | .8014 | .8028 | .7977 | .0139 | |
| .010 | .0297 | -.0148 | .2953 | .1938 | .1288 | .1862 | .2207 | | |
| .020 | .0070 | -.0096 | .2390 | .0715 | .0754 | .0557 | .0585 | -.0148 | |
| .040 | | .0008 | .0944 | | | | | | |
| .050 | .0134 | | | .0010 | .0277 | .0091 | .0117 | | |
| .069 | | | | | | | | -.0221 | |
| .080 | | | | -.0209 | | | | | |
| .081 | | | .1018 | | | | | | |
| .088 | | .1787 | | | | | | | |
| .094 | -.0084 | | | | | | | | |
| .150 | | | | .0000 | -.0067 | .0146 | -.0057 | | |
| .157 | | | | | | | | -.0187 | |
| .163 | | .1551 | | | | | | | |
| .177 | | | .0038 | | | | | | |
| .220 | -.0095 | | | | | | | | |
| .248 | | .0431 | | | | | | | |
| .250 | | | | -.0048 | -.0207 | -.0057 | .0075 | | |
| .274 | | | .0216 | | | | | | |

REPRODUCIBILITY

ARC87-019 IAB1 LVAP(ALLML SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 2) = -4.224 BETAO ( 2) = -3.999

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BM | .2980 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CM | | | | | | | | | |
| .348 | | | | | | | | .0000 | |
| .382 | .0000 | | | | | | | | |
| .390 | | -.0118 | | | | | | | |
| .400 | | | | -.0132 | -.0190 | | -.0120 | | |
| .402 | | | .0081 | | | | | | |
| .418 | | | | | | | | | -.0396 |
| .487 | .0585 | | | | | | | | |
| .503 | | | | | | | | -.0089 | |
| .550 | | | | .0823 | -.0083 | | | | |
| .585 | | | .1870 | | | | | | |
| .600 | | | | | | | -.0282 | | |
| .637 | | .1208 | | | | | | | |
| .650 | | | | | | -.0441 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0337 | | | | |
| .725 | | | | .0476 | | | | | |
| .730 | | | | | | | | | -.1008 |
| .750 | | | | | | | -.0828 | -.0872 | |
| .760 | | | .0582 | | | | | | |
| .775 | | | | .1271 | .1288 | | | | |
| .798 | | .1050 | | | | | | | |
| .800 | | | .1331 | | | | | | |
| .834 | .0285 | | | | | | | | |
| .838 | | .1082 | | | | | | | |
| .850 | | | | .1993 | .1170 | -.1280 | | | |
| .857 | | | .1728 | | | | | | |
| .862 | | | | | | | | -.0845 | |
| .885 | .0843 | | | | | | | | |
| .892 | | .0406 | | | | | | | |
| .900 | -.0347 | | | .1817 | | | -.1418 | | |
| .905 | | | .1753 | | | | | | |
| .919 | | .0818 | | | | | | | |
| .950 | | | | .1230 | .0884 | -.1344 | | | |
| .953 | | | .1137 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .985 | .0128 | | | | | | | | |
| 1.000 | | | -.0838 | | -.0788 | | -.1388 | | |

ARC97-019 IA81 LVAP(ALUM. SEALED) LEFT WING BOT. (RETL38)

ALPHA0( 2) = -4.188 BETA0 ( 3) = .210

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2980 | .3840 | .4270 | .5340 | .6730 | .7900 | .8870 | .8720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0312 | -.0297 | .2824 | .0462 | .6054 | .0124 | .8337 | -.0404 | |
| .010 | .0142 | -.0451 | .2285 | .1045 | .0608 | .1058 | .131. | | |
| .020 | .0081 | -.0010 | .1778 | .0178 | .0192 | -.0048 | -.0028 | -.0803 | |
| .048 | | .0448 | .0531 | | | | | | |
| .050 | .0245 | | | -.0268 | -.0178 | -.0428 | -.0424 | | |
| .088 | | | | | | | | -.0858 | |
| .080 | | | | -.0384 | | | | | |
| .081 | | | .0118 | | | | | | |
| 006 | | .0844 | | | | | | | |
| .094 | -.0284 | | | | | | | | |
| .150 | | | | -.0488 | -.0482 | -.0180 | -.0618 | | |
| .157 | | | | | | | | -.0820 | |
| .163 | | .1022 | | | | | | | |
| .177 | | | -.0005 | | | | | | |
| .229 | -.0402 | | | | | | | | |
| .246 | | .0522 | | | | | | | |
| .250 | | | | -.0413 | -.0843 | -.0505 | -.0305 | | |
| .274 | | | -.0425 | | | | | | |
| .345 | | | | | | | | -.1481 | |
| .362 | .0000 | | | | | | | | |
| .380 | | -.0183 | | | | | | | |
| .400 | | | | .0844 | -.0888 | | -.0578 | | |
| .402 | | | .1085 | | | | | | |
| .418 | | | | | | | | | -.0842 |
| .487 | -.0238 | | | | | | | | |
| .503 | | | | | | | | -.0528 | |
| .550 | | | | .0348 | .0148 | | | | |
| .585 | | | .0503 | | | | | | |
| .600 | | | | | | | -.0085 | | |
| .637 | | .0838 | | | | | | | |
| .650 | | | | | | -.0888 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0118 | | | | |
| .725 | | | | -.0174 | | | | | |
| .730 | | | | | | | | | -.1381 |
| .750 | | | | | | -.0802 | -.1237 | | |
| .780 | | | .0823 | | | | | | |
| .775 | | | | .0438 | .0834 | | | | |
| .788 | | .0888 | | | | | | | |
| .806 | | | .0810 | | | | | | |
| .834 | -.0738 | | | | | | | | |
| .838 | | -.0184 | | | | | | | |
| .850 | | | | .1887 | .0885 | -.0883 | | | |
| .857 | | | .0956 | | | | | | |
| .862 | | | | | | | | -.0754 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 2) = -4.198 BETAO ( 3) = .210

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .885 | -.0887 | | | | | | | | |
| .879 | | -.0853 | | | | | | | |
| .900 | -.0911 | | | .1470 | | | -.1432 | | |
| .905 | | | .0226 | | | | | | |
| .919 | | -.0401 | | | | | | | |
| .950 | | | | .0680 | .0429 | -.0698 | | | |
| .953 | | | -.0303 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0101 | | | | | | | | |
| 1.000 | | | -.1014 | | -.0979 | | -.1070 | | |

ALPHAO( 2) = -4.182 BETAO ( 4) = 4.387

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0132 | -.0199 | .1754 | .5370 | .4626 | .4269 | .5121 | -.0956 | |
| .010 | -.0070 | -.0066 | .1596 | .0940 | -.0150 | .0559 | .0634 | | |
| .020 | -.0035 | .0099 | .1385 | .0025 | -.0506 | -.0331 | -.0498 | -.1095 | |
| .040 | | .0151 | .0461 | | | | | | |
| .050 | -.0290 | | | -.0574 | -.0834 | -.0719 | -.0870 | | |
| .069 | | | | | | | | -.1137 | |
| .080 | | | | -.0778 | | | | | |
| .081 | | | -.0138 | | | | | | |
| .086 | | .0046 | | | | | | | |
| .094 | -.0228 | | | | | | | | |
| .150 | | | | -.0847 | -.0967 | -.0463 | -.0972 | | |
| .157 | | | | | | | | -.1102 | |
| .163 | | .0218 | | | | | | | |
| .177 | | | -.0517 | | | | | | |
| .229 | .0121 | | | | | | | | |
| .246 | | -.0030 | | | | | | | |
| .250 | | | | -.0828 | -.0918 | -.0933 | -.0827 | | |
| .274 | | | -.0419 | | | | | | |
| .345 | | | | | | | | -.0921 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0033 | | | | | | | |
| .400 | | | | .0406 | .0008 | | -.1048 | | |
| .402 | | | .0978 | | | | | | |
| .418 | | | | | | | | | -.1277 |
| .497 | .0145 | | | | | | | | |
| .503 | | | | | | | | -.0987 | |
| .550 | | | | .0334 | .0040 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 2) = -4.182 BETAO ( 4) = 4.387

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .588 | | | .0660 | | | | | | |
| .600 | | | | | | | -.1118 | | |
| .637 | | .0565 | | | | | | | |
| .650 | | | | | | -.0348 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0199 | | | | |
| .725 | | | | .0237 | | | | | |
| .730 | | | | | | | | | -.1674 |
| .750 | | | | | | -.0594 | -.1236 | | |
| .760 | | | -.0194 | | | | | | |
| .775 | | | | .0849 | .0850 | | | | |
| .798 | | -.0530 | | | | | | | |
| .808 | | | -.0030 | | | | | | |
| .834 | -.1101 | | | | | | | | |
| .839 | | -.0838 | | | | | | | |
| .850 | | | | .0353 | .0992 | -.0668 | | | |
| .857 | | | -.0562 | | | | | | |
| .862 | | | | | | | | -.0770 | |
| .865 | -.1118 | | | | | | | | |
| .879 | | -.1114 | | | | | | | |
| .900 | -.1184 | | | -.0041 | | | -.1066 | | |
| .905 | | | -.0902 | | | | | | |
| .919 | | -.1041 | | | | | | | |
| .950 | | | | -.0482 | .0213 | -.0748 | | | |
| .953 | | | -.0988 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0374 | | | | | | | | |
| 1.000 | | | -.1287 | | -.1017 | | -.0953 | | |

ALPHAO( 2) = -4.178 BETAO ( 8) = 8.418

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0252 | -.0360 | .1220 | .4953 | .4127 | .3747 | .3453 | -.1212 | |
| .010 | -.0116 | -.0381 | .1048 | .0559 | -.0294 | -.0038 | -.0068 | | |
| .020 | -.0112 | -.0384 | .0840 | -.0251 | -.0609 | -.0888 | -.0889 | -.1265 | |
| .040 | | -.0357 | .0254 | | | | | | |
| .050 | -.0388 | | | -.0671 | -.0841 | -.1211 | -.1145 | | |
| .069 | | | | | | | | -.1304 | |
| .080 | | | | -.0717 | | | | | |
| .081 | | | -.0098 | | | | | | |
| .086 | | -.0184 | | | | | | | |

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ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHA0( 2) = -4.175 BETA0 ( 5) = 6.419

SECTION ( 11LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0565 | | | | | | | | |
| .150 | | | | -.0949 | -.1114 | -.0680 | -.1163 | | |
| .157 | | | | | | | | -.1294 | |
| .163 | | .0155 | | | | | | | |
| .177 | | | -.0179 | | | | | | |
| .229 | -.0123 | | | | | | | | |
| .248 | | -.0072 | | | | | | | |
| .250 | | | | -.0703 | -.1160 | -.1213 | -.0728 | | |
| .274 | | | -.0470 | | | | | | |
| .345 | | | | | | | | -.1105 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0167 | | | | | | | |
| .400 | | | | .0535 | -.0154 | | -.1201 | | |
| .402 | | | .1012 | | | | | | |
| .418 | | | | | | | | | -.1400 |
| .497 | -.0031 | | | | | | | | |
| .503 | | | | | | | | -.1151 | |
| .550 | | | | .0528 | -.0175 | | | | |
| .565 | | | .0468 | | | | | | |
| .600 | | | | | | | -.0848 | | |
| .637 | | .0114 | | | | | | | |
| .650 | | | | | | -.0382 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0079 | | | | |
| .725 | | | | .0180 | | | | | |
| .730 | | | | | | | | | -.1755 |
| .750 | | | | | | -.0808 | -.0970 | | |
| .760 | | | -.0667 | | | | | | |
| .775 | | | | .0253 | .0743 | | | | |
| .798 | | -.0834 | | | | | | | |
| .808 | | | -.0460 | | | | | | |
| .834 | -.1143 | | | | | | | | |
| .839 | | -.0788 | | | | | | | |
| .850 | | | | -.0175 | .0016 | -.0911 | | | |
| .857 | | | -.0848 | | | | | | |
| .862 | | | | | | | | -.0825 | |
| .885 | -.1051 | | | | | | | | |
| .879 | | -.0939 | | | | | | | |
| .900 | -.1107 | | | -.0722 | | | -.1141 | | |
| .905 | | | -.0958 | | | | | | |
| .919 | | -.1195 | | | | | | | |
| .950 | | | | -.1048 | -.0815 | -.1056 | | | |
| .953 | | | -.1282 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0399 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 2) = -4.175 BETAO ( 5) = 6.419

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1408 | | -.1323 | | -.1208 | | |

ALPHAO( 3) = -2.171 BETAO ( 1) = -6.052

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0745 | .0600 | .4853 | .9520 | .8838 | .8803 | .9003 | .0976 | |
| .010 | .0473 | .0137 | .3689 | .2636 | .1900 | .2469 | .3003 | | |
| .020 | .0208 | -.0147 | .3002 | .1316 | .1414 | .1283 | .1176 | .0635 | |
| .040 | | -.0098 | .1345 | | | | | | |
| .050 | -.0288 | | | .0558 | .0952 | .0790 | .0712 | | |
| .069 | | | | | | | | .0465 | |
| .080 | | | | .0208 | | | | | |
| .081 | | | .0658 | | | | | | |
| .086 | | .1641 | | | | | | | |
| .094 | -.0008 | | | | | | | | |
| .150 | | | | .0336 | .0505 | .0715 | .0584 | | |
| .157 | | | | | | | | .0437 | |
| .163 | | .1396 | | | | | | | |
| .177 | | | .0374 | | | | | | |
| .229 | .0208 | | | | | | | | |
| .246 | | .0593 | | | | | | | |
| .250 | | | | .0326 | .0344 | .0581 | .0614 | | |
| .274 | | | .0714 | | | | | | |
| .345 | | | | | | | | .0518 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0180 | | | | | | | |
| .400 | | | | .0281 | .0197 | | .0440 | | |
| .402 | | | .0420 | | | | | | |
| .418 | | | | | | | | | .0312 |
| .497 | .0785 | | | | | | | | |
| .503 | | | | | | | | .0408 | |
| .550 | | | | .0315 | .0224 | | | | |
| .565 | | | .1650 | | | | | | |
| .600 | | | | | | | .0181 | | |
| .637 | | .1783 | | | | | | | |
| .650 | | | | | | -.0057 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | - 0126 | | | | |
| .725 | | | | .0911 | | | | | |
| .730 | | | | | | | | | -.0351 |
| .750 | | | | | | -.0733 | -.0650 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 3) = -2.171 BETAO ( 1) = -6.052

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .0935 | | | | | | |
| .775 | | | | .1881 | .1449 | | | | |
| .798 | | .1501 | | | | | | | |
| .808 | | | .1822 | | | | | | |
| .834 | .0130 | | | | | | | | |
| .839 | | .1213 | | | | | | | |
| .850 | | | | .2745 | .1470 | -.1080 | | | |
| .857 | | | .3640 | | | | | | |
| .862 | | | | | | | | -.0457 | |
| .865 | .0721 | | | | | | | | |
| .879 | | .0471 | | | | | | | |
| .900 | .0105 | | | .2689 | | | -.1186 | | |
| .905 | | | .2319 | | | | | | |
| .919 | | .2471 | | | | | | | |
| .950 | | | | .2011 | .1262 | -.1321 | | | |
| .953 | | | .1378 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | .0467 | | | | | | | | |
| 1.000 | | | -.0453 | | -.0959 | | -.1284 | | |

ALPHAO( 3) = -2.155 BETAO ( 2) = -1.900

SECTION ( 1:LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0175 | -.0200 | .3535 | .7812 | .7251 | .7379 | .7381 | .0304 | |
| .010 | .0008 | -.0536 | .2623 | .1824 | .1189 | .1754 | .2121 | | |
| .020 | -.0127 | -.0652 | .2198 | .0697 | .0738 | .0592 | .0577 | .0159 | |
| .040 | | -.0459 | .0926 | | | | | | |
| .050 | .0274 | | | .0173 | .0310 | .0127 | .0159 | | |
| .069 | | | | | | | | .0024 | |
| .080 | | | | .0017 | | | | | |
| .081 | | | .0828 | | | | | | |
| .086 | | .0617 | | | | | | | |
| .094 | -.0383 | | | | | | | | |
| .150 | | | | -.0077 | -.0038 | .0159 | .0021 | | |
| .157 | | | | | | | | .0009 | |
| .163 | | .1417 | | | | | | | |
| .177 | | | -.0181 | | | | | | |
| .229 | -.0333 | | | | | | | | |
| .246 | | .0195 | | | | | | | |
| .250 | | | | -.0299 | -.0229 | -.0048 | .0118 | | |
| .274 | | | .0175 | | | | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 3) = -2.155 BETAG ( 2) = -1.900

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .0020 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0100 | | | | | | | |
| .400 | | | | -.0230 | -.0251 | | -.0129 | | |
| .402 | | | -.0049 | | | | | | |
| .418 | | | | | | | | | -.0175 |
| .497 | .0167 | | | | | | | | |
| .503 | | | | | | | | -.0111 | |
| .550 | | | | .0749 | -.0192 | | | | |
| .565 | | | .0407 | | | | | | |
| .600 | | | | | | | -.0335 | | |
| .637 | | .1246 | | | | | | | |
| .650 | | | | | | -.0471 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0255 | | | | |
| .725 | | | | .0418 | | | | | |
| .730 | | | | | | | | | -.0816 |
| .750 | | | | | | -.1038 | -.1003 | | |
| .760 | | | .1062 | | | | | | |
| .775 | | | | .0985 | .1307 | | | | |
| .798 | | .0938 | | | | | | | |
| .808 | | | .1764 | | | | | | |
| .834 | -.0548 | | | | | | | | |
| .839 | | .0570 | | | | | | | |
| .850 | | | | .1799 | .1237 | -.0946 | | | |
| .857 | | | .1392 | | | | | | |
| .862 | | | | | | | | -.0839 | |
| .865 | -.0223 | | | | | | | | |
| .879 | | -.0113 | | | | | | | |
| .900 | -.0816 | | | .1704 | | | -.1440 | | |
| .905 | | | .0943 | | | | | | |
| .919 | | -.0492 | | | | | | | |
| .950 | | | | .1172 | .0892 | -.0737 | | | |
| .953 | | | .0147 | | | | | | |
| .958 | | .0000 | | | | | | | |
| .965 | -.0154 | | | | | | | | |
| 1.000 | | | -.0985 | | -.1029 | | -.1288 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 3) = -2.141 BETAO ( 3) = 2.289

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0214 | -.0827 | .2418 | .5401 | .5598 | .5844 | .5969 | -.0342 | |
| .010 | -.0143 | -.0851 | .1773 | .0720 | .0600 | .1012 | .1354 | | |
| .020 | .0032 | -.0878 | .1379 | -.0034 | .0186 | .0034 | .0053 | -.0471 | |
| .040 | | -.0548 | .0701 | | | | | | |
| .050 | -.0238 | | | -.0367 | -.0287 | -.0352 | -.0341 | | |
| .069 | | | | | | | | -.0545 | |
| .080 | | | | -.0440 | | | | | |
| .081 | | | -.0093 | | | | | | |
| .086 | | .0421 | | | | | | | |
| .094 | -.0447 | | | | | | | | |
| .150 | | | | -.0662 | -.0585 | -.0224 | -.0519 | | |
| .157 | | | | | | | | -.0538 | |
| .183 | | .0435 | | | | | | | |
| .177 | | | -.0234 | | | | | | |
| .229 | -.0859 | | | | | | | | |
| .246 | | .0220 | | | | | | | |
| .250 | | | | -.0430 | -.0722 | -.0600 | -.0314 | | |
| .274 | | | -.0564 | | | | | | |
| .345 | | | | | | | | -.0488 | |
| .362 | .0000 | | | | | | | | |
| .380 | | -.0085 | | | | | | | |
| .400 | | | | .0483 | -.0487 | | -.0627 | | |
| .402 | | | .0784 | | | | | | |
| .418 | | | | | | | | | -.0709 |
| .497 | -.0003 | | | | | | | | |
| .503 | | | | | | | | -.0563 | |
| .550 | | | | .0289 | .0191 | | | | |
| .565 | | | .0859 | | | | | | |
| .600 | | | | | | | -.0795 | | |
| .637 | | .0722 | | | | | | | |
| .650 | | | | | | -.0487 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0139 | | | | |
| .725 | | | | .0289 | | | | | |
| .730 | | | | | | | | | -.1253 |
| .750 | | | | | | -.0554 | -.1318 | | |
| .760 | | | -.0125 | | | | | | |
| .775 | | | | .1244 | .1200 | | | | |
| .798 | | -.0345 | | | | | | | |
| .808 | | | .0188 | | | | | | |
| .834 | -.1072 | | | | | | | | |
| .839 | | -.0801 | | | | | | | |
| .850 | | | | .1588 | .1526 | -.0437 | | | |
| .857 | | | .0170 | | | | | | |
| .862 | | | | | | | | -.0773 | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 3) = -2.141 BETAO ( 3) = 2.289

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.1026 | | | | | | | | |
| .879 | | -.0879 | | | | | | | |
| .900 | -.1082 | | | .0821 | | | -.1378 | | |
| .905 | | | -.0813 | | | | | | |
| .919 | | -.0313 | | | | | | | |
| .950 | | | | -.0133 | .0892 | -.0881 | | | |
| .953 | | | -.0596 | | | | | | |
| .955 | | .0090 | | | | | | | |
| .985 | -.0247 | | | | | | | | |
| 1.000 | | | -.1197 | | -.1089 | | -.1254 | | |

ALPHAO( 3) = -2.131 BETAO ( 4) = 6.395

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0538 | -.0517 | .1051 | .4580 | .3928 | .3843 | .4624 | -.0891 | |
| .010 | -.0490 | -.0524 | .0970 | .0478 | -.0434 | .0260 | .0598 | | |
| .020 | -.0486 | -.0438 | .0816 | -.0281 | -.0725 | -.0533 | -.0453 | -.0955 | |
| .040 | | -.0415 | .0328 | | | | | | |
| .050 | -.0685 | | | -.0642 | -.0918 | -.0828 | -.0808 | | |
| .069 | | | | | | | | -.1018 | |
| .080 | | | | -.0722 | | | | | |
| .081 | | | -.0209 | | | | | | |
| .086 | | -.0074 | | | | | | | |
| .094 | -.0880 | | | | | | | | |
| .150 | | | | -.0902 | -.0991 | -.0503 | -.0950 | | |
| .157 | | | | | | | | -.0994 | |
| .163 | | .0129 | | | | | | | |
| .177 | | | -.0258 | | | | | | |
| .229 | -.0284 | | | | | | | | |
| .246 | | -.0018 | | | | | | | |
| .250 | | | | -.0711 | -.0998 | -.0829 | -.0810 | | |
| .274 | | | -.0195 | | | | | | |
| .345 | | | | | | | | -.0934 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0040 | | | | | | | |
| .400 | | | | .0801 | .0139 | | -.1030 | | |
| .402 | | | .0840 | | | | | | |
| .418 | | | | | | | | | -.1122 |
| .497 | -.0025 | | | | | | | | |
| .503 | | | | | | | | -.1002 | |
| .550 | | | | .0718 | .0295 | | | | |

ARC97-019 IABI LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 3) = -2.131 BETAO ( 4) = 6.395

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .0588 | | | | | | |
| .600 | | | | | | | -.0838 | | |
| .637 | | .0342 | | | | | | | |
| .650 | | | | | | -.0077 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0521 | | | | |
| .725 | | | | .0279 | | | | | |
| .730 | | | | | | | | | -.1548 |
| .750 | | | | | | -.0322 | -.0731 | | |
| .760 | | | -.0746 | | | | | | |
| .775 | | | | .0313 | .1033 | | | | |
| .798 | | -.0781 | | | | | | | |
| .808 | | | -.0335 | | | | | | |
| .834 | -.1076 | | | | | | | | |
| .839 | | -.0686 | | | | | | | |
| .850 | | | | -.0072 | .0160 | -.0496 | | | |
| .857 | | | -.0500 | | | | | | |
| .862 | | | | | | | | -.0723 | |
| .865 | -.0948 | | | | | | | | |
| .879 | | -.0827 | | | | | | | |
| .900 | -.0905 | | | -.0577 | | | -.0906 | | |
| .905 | | | -.0900 | | | | | | |
| .919 | | -.1030 | | | | | | | |
| .950 | | | | -.0903 | -.0672 | -.0687 | | | |
| .953 | | | -.1216 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0373 | | | | | | | | |
| 1.000 | | | -.1367 | | -.1329 | | -.1144 | | |

ALPHAO( 4) = -.107 BETAO ( 1) = -8.062

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0582 | .0939 | .4718 | .0496 | .9032 | .0967 | .9117 | .1343 | |
| .010 | .0387 | .0823 | .3581 | .2719 | .2273 | .2755 | .3457 | | |
| .020 | .0142 | .1005 | .2885 | .1423 | .1797 | .1558 | .1521 | .1048 | |
| .040 | | .0865 | .1292 | | | | | | |
| .050 | -.0340 | | | .0707 | .1215 | .1023 | .1048 | | |
| .069 | | | | | | | | .0831 | |
| .080 | | | | .0367 | | | | | |
| .081 | | | .0551 | | | | | | |
| .086 | | .0868 | | | | | | | |

ARC97-019 TAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RE*.38)

ALPHA0( 4) = -.107 BETA0 ( 1) = -6.062

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0085 | | | | | | | | |
| .150 | | | | .0367 | .0634 | .0953 | .0865 | | |
| .157 | | | | | | | | .0724 | |
| .163 | | .1121 | | | | | | | |
| .177 | | | .0417 | | | | | | |
| .229 | .0525 | | | | | | | | |
| .246 | | .0586 | | | | | | | |
| .250 | | | | .0492 | .0500 | .0765 | .0845 | | |
| .274 | | | .0740 | | | | | | |
| .345 | | | | | | | | .0767 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0088 | | | | | | | |
| .400 | | | | .0405 | .0380 | | .0685 | | |
| .402 | | | .0351 | | | | | | |
| .418 | | | | | | | | | .0614 |
| .497 | .0646 | | | | | | | | |
| .503 | | | | | | | | .0606 | |
| .550 | | | | .0291 | .0245 | | | | |
| .565 | | | .1057 | | | | | | |
| .600 | | | | | | | .0382 | | |
| .637 | | .1804 | | | | | | | |
| .650 | | | | | | .0141 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0019 | | | | |
| .725 | | | | .0975 | | | | | |
| .730 | | | | | | | | | -.0032 |
| .750 | | | | | | -.0625 | -.0514 | | |
| .760 | | | .0980 | | | | | | |
| .775 | | | | .1972 | .1433 | | | | |
| .798 | | .1474 | | | | | | | |
| .800 | | | .1860 | | | | | | |
| .834 | .0181 | | | | | | | | |
| .839 | | .1327 | | | | | | | |
| .850 | | | | .2778 | .1418 | -.1043 | | | |
| .857 | | | .3598 | | | | | | |
| .862 | | | | | | | | -.0405 | |
| .882 | .0774 | | | | | | | | |
| .879 | | .0853 | | | | | | | |
| .900 | .0245 | | | .2848 | | | -.1112 | | |
| .905 | | | .2422 | | | | | | |
| .919 | | .2772 | | | | | | | |
| .950 | | | | .2273 | .1348 | -.1292 | | | |
| .953 | | | .1562 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .985 | .0514 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (REFL38)

ALPHA0( 4) = -.107 BETA0 ( 1) = -6.062

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BM | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.0583 | | -.1031 | | -.1247 | | |

ALPHA0( 4) = -.104 BETA0 ( 2) = -4.014

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BM | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0200 | .0181 | .4286 | .8806 | .8209 | .8278 | .8400 | .0982 | |
| .010 | .0016 | -.0131 | .3305 | .2465 | .1892 | .2352 | .2991 | | |
| .020 | -.0179 | .0555 | .2676 | .1176 | .1443 | .1257 | .1198 | .0740 | |
| .040 | | .0650 | .1137 | | | | | | |
| .050 | -.0448 | | | .0377 | .0899 | .0777 | .0775 | | |
| .069 | | | | | | | | .0541 | |
| .080 | | | | .0030 | | | | | |
| .081 | | | .0226 | | | | | | |
| .086 | | .0846 | | | | | | | |
| .094 | -.0257 | | | | | | | | |
| .150 | | | | .0127 | .0313 | .0676 | .0584 | | |
| .157 | | | | | | | | .0459 | |
| .163 | | .0878 | | | | | | | |
| .177 | | | .0167 | | | | | | |
| .229 | -.0037 | | | | | | | | |
| .246 | | .0471 | | | | | | | |
| .250 | | | | .0193 | .0180 | .0456 | .0598 | | |
| .274 | | | .0283 | | | | | | |
| .345 | | | | | | | | .0470 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0263 | | | | | | | |
| .400 | | | | .0078 | .0085 | | .0420 | | |
| .402 | | | -.0006 | | | | | | |
| .418 | | | | | | | | | .0308 |
| .497 | .0381 | | | | | | | | |
| .503 | | | | | | | | .0328 | |
| .550 | | | | .0530 | .0179 | | | | |
| .585 | | | .1288 | | | | | | |
| .600 | | | | | | | .0111 | | |
| .637 | | .1296 | | | | | | | |
| .650 | | | | | | -.0112 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0259 | | | | |
| .725 | | | | .0700 | | | | | |
| .730 | | | | | | | | | -.0261 |
| .750 | | | | | | -.0785 | -.0714 | | |

ARC97-019 IAB1 LVAP(ALLML SCALED) LEFT WING BOT. (RETL38)

ALPHAO( 4) = -.104 BETAO ( 2) = -4.014

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .0620 | | | | | | |
| .775 | | | | .1530 | .1358 | | | | |
| .788 | | .1209 | | | | | | | |
| .808 | | | .1284 | | | | | | |
| .834 | .0271 | | | | | | | | |
| .839 | | .1152 | | | | | | | |
| .850 | | | | .2242 | .1205 | -.1098 | | | |
| .857 | | | .2922 | | | | | | |
| .862 | | | | | | | | -.0528 | |
| .865 | .0738 | | | | | | | | |
| .879 | | .0513 | | | | | | | |
| .900 | -.0201 | | | .2134 | | | -.1244 | | |
| .905 | | | .2038 | | | | | | |
| .919 | | .2027 | | | | | | | |
| .950 | | | | .1572 | .1038 | -.1362 | | | |
| .953 | | | .1232 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | .0312 | | | | | | | | |
| 1.000 | | | -.0785 | | -.1079 | | -.1381 | | |

ALPHAO( 4) = -.095 BETAO ( 3) = .177

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0198 | -.0547 | .2703 | .7217 | .6480 | .6684 | .6716 | .0378 | |
| .010 | -.0187 | -.0705 | .1860 | .1692 | .1115 | .1585 | .2014 | | |
| .020 | -.0045 | -.0495 | .1525 | .0529 | .0781 | .0567 | .0592 | .0235 | |
| .040 | | -.0252 | .0404 | | | | | | |
| .050 | -.0212 | | | -.0086 | .0326 | .0116 | .0191 | | |
| .069 | | | | | | | | .0100 | |
| .080 | | | | -.0048 | | | | | |
| .081 | | | .0671 | | | | | | |
| .086 | | .0942 | | | | | | | |
| .094 | -.0085 | | | | | | | | |
| .150 | | | | -.0267 | -.0126 | .0187 | .0070 | | |
| .157 | | | | | | | | .0015 | |
| .163 | | .0735 | | | | | | | |
| .177 | | | -.0119 | | | | | | |
| .228 | -.0828 | | | | | | | | |
| .248 | | .0413 | | | | | | | |
| .250 | | | | -.0433 | -.0319 | -.0075 | .0150 | | |
| .274 | | | -.0208 | | | | | | |

ARC97-019 (AS) LVAP(ALL HL SEALED) LEFT WING BOT. (RETL38)

ALPHA0( 4) = -.095 BETA0 ( 3) = .177

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BM | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8670 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CM | | | | | | | | | |
| .345 | | | | | | | | .0015 | |
| .382 | .0000 | | | | | | | | |
| .390 | | -.0078 | | | | | | | |
| .400 | | | | .0020 | -.0408 | | -.0117 | | |
| .402 | | | .0833 | | | | | | |
| .418 | | | | | | | | | -.0121 |
| .487 | -.0112 | | | | | | | | |
| .503 | | | | | | | | -.0117 | |
| .550 | | | | .0815 | -.0142 | | | | |
| .565 | | | .0903 | | | | | | |
| .800 | | | | | | | -.0362 | | |
| .837 | | .1031 | | | | | | | |
| .850 | | | | | | -.0547 | | | |
| .870 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0057 | | | | |
| .725 | | | | .0077 | | | | | |
| .730 | | | | | | | | | -.0650 |
| .750 | | | | | | -.1038 | -.1031 | | |
| .760 | | | .0208 | | | | | | |
| .775 | | | | .0695 | .1005 | | | | |
| .798 | | .0027 | | | | | | | |
| .808 | | | .0587 | | | | | | |
| .834 | -.0708 | | | | | | | | |
| .839 | | -.0158 | | | | | | | |
| .850 | | | | .2258 | .1130 | -.1088 | | | |
| .857 | | | .0773 | | | | | | |
| .862 | | | | | | | | -.0668 | |
| .865 | -.0687 | | | | | | | | |
| .879 | | -.0558 | | | | | | | |
| .900 | -.0841 | | | .1795 | | | -.1457 | | |
| .905 | | | .0401 | | | | | | |
| .919 | | .0182 | | | | | | | |
| .950 | | | | .0922 | .0807 | -.0862 | | | |
| .953 | | | -.0042 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0035 | | | | | | | | |
| 1.000 | | | -.1110 | | -.0830 | | -.1415 | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 4) = -.081 BETAO ( 4) = 4.323

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .5730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0681 | -.0811 | .1517 | .4879 | 5001 | .5070 | .5508 | -.0264 | |
| .010 | -.0623 | -.0491 | .1375 | .1036 | .0528 | .0922 | .1364 | | |
| .020 | -.0506 | -.0199 | .1107 | .0178 | .0239 | .0096 | .0124 | -.0350 | |
| .040 | | -.0149 | .0248 | | | | | | |
| .050 | -.0588 | | | -.0353 | -.0176 | -.0263 | -.0249 | | |
| .069 | | | | | | | | -.0442 | |
| .080 | | | | -.0541 | | | | | |
| .081 | | | -.0301 | | | | | | |
| .086 | | -.0283 | | | | | | | |
| .094 | -.0648 | | | | | | | | |
| .150 | | | | -.0607 | -.0605 | -.0156 | -.0434 | | |
| .157 | | | | | | | | -.0485 | |
| .163 | | -.0058 | | | | | | | |
| .177 | | | -.0604 | | | | | | |
| .229 | -.0840 | | | | | | | | |
| .246 | | -.0160 | | | | | | | |
| .250 | | | | -.0666 | -.0805 | -.0565 | -.0275 | | |
| .274 | | | -.0065 | | | | | | |
| .345 | | | | | | | | -.0478 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0153 | | | | | | | |
| .400 | | | | .0625 | -.0384 | | -.0613 | | |
| .402 | | | .0987 | | | | | | |
| .418 | | | | | | | | | -.0632 |
| .497 | .0319 | | | | | | | | |
| .503 | | | | | | | | -.0585 | |
| .550 | | | | .0792 | .0263 | | | | |
| .565 | | | .0843 | | | | | | |
| .600 | | | | | | | -.0827 | | |
| .637 | | .0718 | | | | | | | |
| .650 | | | | | | -.0021 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0479 | | | | |
| .725 | | | | .0702 | | | | | |
| .730 | | | | | | | | | -.1098 |
| .750 | | | | | | -.0199 | -.1287 | | |
| .760 | | | -.0072 | | | | | | |
| .775 | | | | .1290 | .2081 | | | | |
| .798 | | -.0452 | | | | | | | |
| .808 | | | .0326 | | | | | | |
| .834 | -.1103 | | | | | | | | |
| .839 | | -.0680 | | | | | | | |
| .850 | | | | .0897 | .2012 | -.0132 | | | |
| .857 | | | -.0121 | | | | | | |
| .862 | | | | | | | | -.0703 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 4) = -.081 BETAO ( 4) = 4.323

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.1098 | | | | | | | | |
| .879 | | -.0719 | | | | | | | |
| .900 | -.0975 | | | .0159 | | | -.1049 | | |
| .905 | | | -.0442 | | | | | | |
| .919 | | -.0715 | | | | | | | |
| .950 | | | | -.0425 | .0131 | -.0387 | | | |
| .953 | | | -.0773 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0354 | | | | | | | | |
| 1.000 | | | -.1319 | | -.1280 | | -.1273 | | |

ALPHAO( 4) = -.076 BETAO ( 5) = 6.389

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0820 | -.0735 | .0865 | .3813 | .3902 | .4454 | .4708 | -.0539 | |
| .010 | -.0783 | -.0738 | .0861 | .0384 | .0306 | .0617 | .0913 | | |
| .020 | -.0754 | -.0633 | .0714 | -.0194 | .0064 | -.0208 | -.0172 | -.0604 | |
| .040 | | -.0615 | .0186 | | | | | | |
| .050 | -.0879 | | | -.0417 | -.0403 | -.0583 | -.0517 | | |
| .069 | | | | | | | | -.0686 | |
| .080 | | | | -.0552 | | | | | |
| .081 | | | -.0303 | | | | | | |
| .086 | | -.0277 | | | | | | | |
| .094 | -.0960 | | | | | | | | |
| .150 | | | | -.0580 | -.0709 | -.0350 | -.0691 | | |
| .157 | | | | | | | | -.0721 | |
| .163 | | -.0017 | | | | | | | |
| .177 | | | -.0050 | | | | | | |
| .229 | -.0505 | | | | | | | | |
| .248 | | .0068 | | | | | | | |
| .250 | | | | -.0173 | -.0800 | -.0752 | -.0457 | | |
| .274 | | | -.0029 | | | | | | |
| .345 | | | | | | | | -.0721 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0003 | | | | | | | |
| .400 | | | | .0780 | .0179 | | -.0800 | | |
| .402 | | | .0770 | | | | | | |
| .418 | | | | | | | | | -.0839 |
| .497 | -.0054 | | | | | | | | |
| .503 | | | | | | | | -.0792 | |
| .550 | | | | .0951 | .0753 | | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) LEFT WING BOT. (RETL3E

ALPHAO( 4) = -.078 BETAO ( 5) = 6.389

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .0738 | | | | | | |
| .600 | | | | | | | -.0721 | | |
| .637 | | .0630 | | | | | | | |
| .650 | | | | | | .0589 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0898 | | | | |
| .725 | | | | .0356 | | | | | |
| .730 | | | | | | | | | -.1248 |
| .750 | | | | | | .0091 | -.0522 | | |
| .760 | | | -.0553 | | | | | | |
| .775 | | | | .0474 | .1226 | | | | |
| .798 | | -.0502 | | | | | | | |
| .808 | | | -.0025 | | | | | | |
| .834 | -.0803 | | | | | | | | |
| .839 | | -.0477 | | | | | | | |
| .850 | | | | .0211 | .0562 | -.0165 | | | |
| .857 | | | -.0485 | | | | | | |
| .862 | | | | | | | | -.0632 | |
| .865 | -.0751 | | | | | | | | |
| .879 | | -.0748 | | | | | | | |
| .900 | -.0829 | | | -.0256 | | | -.0621 | | |
| .905 | | | -.0825 | | | | | | |
| .919 | | -.1018 | | | | | | | |
| .950 | | | | -.0702 | -.0514 | -.0381 | | | |
| .953 | | | -.1196 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0354 | | | | | | | | |
| 1.000 | | | -.1390 | | -.1385 | | -.1185 | | |

ALPHAO( 5) = 1.937 BETAO ( 1) = -8.052

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0375 | .1078 | .4303 | .9489 | .9060 | .8983 | .9188 | .1697 | |
| .010 | .0256 | .1103 | .3381 | .3050 | .2480 | .2859 | .3938 | | |
| .020 | .0048 | .0811 | .2781 | .1700 | .2102 | .1909 | .1938 | .1480 | |
| .040 | | .0670 | .1277 | | | | | | |
| .050 | -.0412 | | | .0877 | .1502 | .1390 | .1455 | | |
| .069 | | | | | | | | .1223 | |
| .080 | | | | .0499 | | | | | |
| .081 | | | .0570 | | | | | | |
| .088 | | .0980 | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 5) = 1.937 BETAO ( 1) = -6.052

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | 8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0085 | | | | | | | | |
| .150 | | | | .0315 | .0881 | .1210 | .1210 | | |
| .157 | | | | | | | | .1060 | |
| .163 | | .0744 | | | | | | | |
| .177 | | | .0462 | | | | | | |
| .229 | .0295 | | | | | | | | |
| .246 | | .0597 | | | | | | | |
| .250 | | | | .0482 | .0608 | .1011 | .1152 | | |
| .274 | | | .0630 | | | | | | |
| .345 | | | | | | | | .1031 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0067 | | | | | | | |
| .400 | | | | .0513 | .0528 | | .0935 | | |
| .402 | | | .0497 | | | | | | |
| .418 | | | | | | | | | .0814 |
| .497 | .0703 | | | | | | | | |
| .503 | | | | | | | | .0843 | |
| .550 | | | | .0485 | .0420 | | | | |
| .565 | | | .1718 | | | | | | |
| .600 | | | | | | | .0597 | | |
| .637 | | .1840 | | | | | | | |
| .650 | | | | | | .0343 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0170 | | | | |
| .725 | | | | .1051 | | | | | |
| .730 | | | | | | | | | .0095 |
| .750 | | | | | | -.0474 | -.0385 | | |
| .760 | | | .1175 | | | | | | |
| .775 | | | | .2057 | .1366 | | | | |
| .798 | | .1314 | | | | | | | |
| .808 | | | .1923 | | | | | | |
| .834 | .0359 | | | | | | | | |
| .839 | | .1384 | | | | | | | |
| .850 | | | | .2806 | .1237 | -.0810 | | | |
| .857 | | | .3294 | | | | | | |
| .862 | | | | | | | | -.0371 | |
| .865 | .0984 | | | | | | | | |
| .879 | | .1454 | | | | | | | |
| .900 | .0256 | | | .2943 | | | -.1019 | | |
| .905 | | | .2370 | | | | | | |
| .919 | | .2799 | | | | | | | |
| .950 | | | | .2473 | .1481 | -.1212 | | | |
| .953 | | | .1677 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | .0495 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 5) = 1.937 BETAO ( 1) = -6.052

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2980 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.0686 | | -.1081 | | -.1811 | | |

ALPHAO( 8) = 1.948 BETAO ( 2) = -1.908

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2980 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0252 | .0272 | .3597 | .7923 | .7655 | .7826 | .7578 | .0986 | |
| .010 | -.0351 | .0459 | .3022 | .2291 | .1743 | .2405 | .3000 | | |
| .020 | -.0447 | .0357 | .2473 | .1089 | .1349 | .1378 | .1311 | .0854 | |
| .040 | | .0251 | .0921 | | | | | | |
| .050 | -.0106 | | | .0431 | .0818 | .0838 | .0909 | | |
| .069 | | | | | | | | .0665 | |
| .080 | | | | .0205 | | | | | |
| .081 | | | .0614 | | | | | | |
| .086 | | .0519 | | | | | | | |
| .094 | -.0560 | | | | | | | | |
| .150 | | | | .0010 | .0287 | .0663 | .0685 | | |
| .157 | | | | | | | | .0565 | |
| .183 | | .0727 | | | | | | | |
| .177 | | | -.0188 | | | | | | |
| .229 | -.0053 | | | | | | | | |
| .246 | | .0112 | | | | | | | |
| .250 | | | | -.0080 | .0140 | .0400 | .0633 | | |
| .274 | | | .0157 | | | | | | |
| .345 | | | | | | | | .0494 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0335 | | | | | | | |
| .400 | | | | -.0098 | .0020 | | .0389 | | |
| .402 | | | .0241 | | | | | | |
| .418 | | | | | | | | | .0270 |
| .497 | .0122 | | | | | | | | |
| .503 | | | | | | | | .0319 | |
| .550 | | | | .0870 | -.0029 | | | | |
| .565 | | | .0709 | | | | | | |
| .600 | | | | | | | .0080 | | |
| .637 | | .0086 | | | | | | | |
| .650 | | | | | | -.0158 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0114 | | | | |
| .725 | | | | .0759 | | | | | |
| .730 | | | | | | | | | -.0310 |
| .750 | | | | | | -.0827 | -.0739 | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 5) = 1.942 BETAO ( 2) = -1.906

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .0550 | | | | | | |
| .775 | | | | .1671 | .1535 | | | | |
| .798 | | .0931 | | | | | | | |
| .808 | | | .1983 | | | | | | |
| .834 | -.0127 | | | | | | | | |
| .839 | | .1037 | | | | | | | |
| .850 | | | | .1953 | .1399 | -.1179 | | | |
| .857 | | | .2885 | | | | | | |
| .862 | | | | | | | | -.0569 | |
| .865 | .0377 | | | | | | | | |
| .879 | | .0798 | | | | | | | |
| .900 | -.0440 | | | .1598 | | | -.1270 | | |
| .905 | | | .1642 | | | | | | |
| .919 | | .0576 | | | | | | | |
| .950 | | | | .1127 | .1081 | -.1062 | | | |
| .953 | | | .0671 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | .0046 | | | | | | | | |
| 1.000 | | | -.1174 | | -.1126 | | -.1431 | | |

ALPHAO( 5) = 1.953 BETAO ( 3) = 2.279

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0642 | -.0870 | .2361 | .6188 | .6062 | .6202 | .6367 | .0428 | |
| .010 | -.0650 | -.0301 | .1920 | .1448 | .1105 | .1560 | .2305 | | |
| .020 | -.0628 | .0043 | .1452 | .0482 | .0765 | .0581 | .0832 | .0337 | |
| .040 | | -.0002 | .0289 | | | | | | |
| .050 | -.0430 | | | .0018 | .0274 | .0258 | .0399 | | |
| .069 | | | | | | | | .0177 | |
| .080 | | | | -.0095 | | | | | |
| .081 | | | .0257 | | | | | | |
| .086 | | .0075 | | | | | | | |
| .094 | -.0868 | | | | | | | | |
| .150 | | | | -.0467 | -.0198 | .0204 | .0147 | | |
| .157 | | | | | | | | .0060 | |
| .183 | | .0418 | | | | | | | |
| .177 | | | -.0398 | | | | | | |
| .229 | -.0728 | | | | | | | | |
| .248 | | .0206 | | | | | | | |
| .250 | | | | -.0491 | -.0287 | -.0119 | .0198 | | |
| .274 | | | -.0519 | | | | | | |

ARC97-019 !AB! LVAP(ALLHL SEALED) LEFT WING BOT. (RETL3B)

ALPHAO( 5) = 1.953 BETAO ( 3) = 2.279

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .0017 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0182 | | | | | | | |
| .400 | | | | .0544 | -.0429 | | -.0097 | | |
| .402 | | | .0890 | | | | | | |
| .418 | | | | | | | | | -.0189 |
| .497 | .0348 | | | | | | | | |
| .503 | | | | | | | | -.0122 | |
| .550 | | | | .0746 | .0338 | | | | |
| .565 | | | .1175 | | | | | | |
| .600 | | | | | | | -.0314 | | |
| .637 | | .0998 | | | | | | | |
| .650 | | | | | | -.0489 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0681 | | | | |
| .725 | | | | .0923 | | | | | |
| .730 | | | | | | | | | -.0645 |
| .750 | | | | | | -.0506 | -.1001 | | |
| .760 | | | .0300 | | | | | | |
| .775 | | | | .2519 | .2027 | | | | |
| .798 | | -.0177 | | | | | | | |
| .808 | | | .0858 | | | | | | |
| .834 | -.0959 | | | | | | | | |
| .839 | | -.0184 | | | | | | | |
| .850 | | | | .2350 | .2573 | -.0102 | | | |
| .857 | | | .0605 | | | | | | |
| .862 | | | | | | | | -.0701 | |
| .865 | -.0824 | | | | | | | | |
| .879 | | .0072 | | | | | | | |
| .900 | -.0875 | | | .1095 | | | -.1384 | | |
| .905 | | | -.0119 | | | | | | |
| .919 | | -.0293 | | | | | | | |
| .950 | | | | .0183 | .1254 | -.0322 | | | |
| .953 | | | -.0537 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0291 | | | | | | | | |
| 1.000 | | | -.1356 | | -.0992 | | -.1300 | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 5) = 1.988 BETAO ( 4) = 6.390

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1018 | -.0972 | .0834 | .4844 | .4721 | .4708 | .5172 | -.0131 | |
| .010 | -.1003 | -.0912 | .0966 | .1078 | .0540 | .0980 | .1515 | | |
| .020 | -.0953 | -.0761 | .0847 | .0370 | .0301 | .0260 | .0280 | -.0170 | |
| .040 | | -.0733 | .0376 | | | | | | |
| .050 | -.1027 | | | -.0009 | -.0084 | -.0105 | -.0089 | | |
| .069 | | | | | | | | -.0281 | |
| .080 | | | | -.0256 | | | | | |
| .081 | | | .0070 | | | | | | |
| .086 | | -.0241 | | | | | | | |
| .094 | -.1017 | | | | | | | | |
| .150 | | | | -.0113 | -.0435 | .0000 | -.0277 | | |
| .157 | | | | | | | | -.0348 | |
| .163 | | .0044 | | | | | | | |
| .177 | | | .0130 | | | | | | |
| .229 | -.0680 | | | | | | | | |
| .246 | | .0501 | | | | | | | |
| .250 | | | | -.0033 | -.0203 | -.0323 | -.0121 | | |
| .274 | | | .0088 | | | | | | |
| .345 | | | | | | | | -.0341 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0202 | | | | | | | |
| .400 | | | | .0978 | .0253 | | -.0348 | | |
| .402 | | | .0776 | | | | | | |
| .418 | | | | | | | | | -.0548 |
| .497 | .0058 | | | | | | | | |
| .503 | | | | | | | | -.0405 | |
| .550 | | | | .1249 | .1335 | | | | |
| .565 | | | .1050 | | | | | | |
| .600 | | | | | | | -.0263 | | |
| .637 | | .0919 | | | | | | | |
| .650 | | | | | | .1221 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1015 | | | | |
| .725 | | | | .0491 | | | | | |
| .730 | | | | | | | | | -.0882 |
| .750 | | | | | | .0305 | -.0099 | | |
| .760 | | | -.0291 | | | | | | |
| .775 | | | | .0797 | .1613 | | | | |
| .798 | | -.0285 | | | | | | | |
| .808 | | | .0105 | | | | | | |
| .834 | -.0737 | | | | | | | | |
| .839 | | -.0335 | | | | | | | |
| .850 | | | | .0533 | .0709 | -.0085 | | | |
| .857 | | | -.0397 | | | | | | |
| .862 | | | | | | | | -.0527 | |

ARC97-019 [A8] LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 5) = 1.988 BETAO ( 4) = 6.390

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.0612 | | | | | | | | |
| .879 | | -.0735 | | | | | | | |
| .900 | -.0751 | | | -.0147 | | | -.0373 | | |
| .905 | | | -.0853 | | | | | | |
| .919 | | -.1037 | | | | | | | |
| .950 | | | | -.0687 | -.0443 | -.0348 | | | |
| .953 | | | -.1120 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0378 | | | | | | | | |
| 1.000 | | | -.1387 | | -.1448 | | -.1237 | | |

ALPHAO( 6) = 3.403 BETAO ( 1) = -6.044

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0025 | .0831 | .4458 | .9652 | .9321 | .9110 | .9294 | .2058 | |
| .010 | .0029 | .0866 | .3743 | .3429 | .2881 | .3695 | .4540 | | |
| .020 | -.0148 | .0673 | .3188 | .2084 | .2671 | .2642 | .2524 | .1955 | |
| .040 | | .0568 | .1557 | | | | | | |
| .050 | -.0038 | | | .1282 | .1920 | .1992 | .2098 | | |
| .069 | | | | | | | | .1678 | |
| .080 | | | | .0890 | | | | | |
| .081 | | | .0760 | | | | | | |
| .088 | | .0868 | | | | | | | |
| .094 | .0217 | | | | | | | | |
| .150 | | | | .0448 | .1113 | .1555 | .1697 | | |
| .157 | | | | | | | | .1468 | |
| .163 | | .0916 | | | | | | | |
| .177 | | | .0570 | | | | | | |
| .229 | .0083 | | | | | | | | |
| .248 | | .0842 | | | | | | | |
| .250 | | | | .0601 | .0801 | .1303 | .1543 | | |
| .274 | | | .0739 | | | | | | |
| .345 | | | | | | | | .1351 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0168 | | | | | | | |
| .400 | | | | .0695 | .0814 | | .1251 | | |
| .402 | | | .0528 | | | | | | |
| .418 | | | | | | | | | .0834 |
| .497 | .0727 | | | | | | | | |
| .503 | | | | | | | | .1098 | |
| .550 | | | | .0695 | .0881 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 6) = 3.403 BETAO ( 1) = -6.044

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .1939 | | | | | | |
| .600 | | | | | | | .0846 | | |
| .637 | | .1934 | | | | | | | |
| .650 | | | | | | .0668 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0411 | | | | |
| .725 | | | | .2258 | | | | | |
| .730 | | | | | | | | | -.0044 |
| .750 | | | | | | -.0265 | -.0210 | | |
| .760 | | | .2441 | | | | | | |
| .775 | | | | .2956 | .2263 | | | | |
| .798 | | .1502 | | | | | | | |
| .808 | | | .3642 | | | | | | |
| .834 | .0476 | | | | | | | | |
| .839 | | .3943 | | | | | | | |
| .850 | | | | .3341 | .2215 | -.0713 | | | |
| .857 | | | .3091 | | | | | | |
| .862 | | | | | | | | -.0381 | |
| .865 | .1170 | | | | | | | | |
| .879 | | .3028 | | | | | | | |
| .900 | .2128 | | | .3185 | | | -.0860 | | |
| .905 | | | .1985 | | | | | | |
| .919 | | .1588 | | | | | | | |
| .950 | | | | .2292 | .2034 | -.1018 | | | |
| .953 | | | .1258 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | .0058 | | | | | | | | |
| 1.000 | | | -.0834 | | -.1112 | | -.1218 | | |

ALPHAO( 6) = 3.401 BETAO ( 2) = -4.080

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0281 | .0535 | .4015 | .0902 | .8723 | .8331 | .8584 | .1857 | |
| .010 | -.0148 | .0830 | .3435 | .3008 | .2542 | .3284 | .4041 | | |
| .020 | -.0305 | .0483 | .2880 | .1784 | .2283 | .2291 | .2148 | .1588 | |
| .040 | | .0399 | .1357 | | | | | | |
| .050 | -.0877 | | | .0974 | .1555 | .1663 | .1780 | | |
| .069 | | | | | | | | .1330 | |
| .080 | | | | .0589 | | | | | |
| .081 | | | .0651 | | | | | | |
| .086 | | .0669 | | | | | | | |

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

ARC97-018 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 6) = 3.401 BETAO ( 2) = -4.060

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0103 | | | | | | | | |
| .150 | | | | .0468 | .0851 | .1264 | .1427 | | |
| .157 | | | | | | | | .1148 | |
| .163 | | .0816 | | | | | | | |
| .177 | | | .0268 | | | | | | |
| .229 | -.0064 | | | | | | | | |
| .246 | | .0454 | | | | | | | |
| .250 | | | | .0492 | .0652 | .1017 | .1294 | | |
| .274 | | | .0469 | | | | | | |
| .345 | | | | | | | | .1020 | |
| .382 | .0000 | | | | | | | | |
| .390 | | -.0089 | | | | | | | |
| .400 | | | | .0402 | .0812 | | .1008 | | |
| .402 | | | .0170 | | | | | | |
| .418 | | | | | | | | | .0501 |
| .497 | .0478 | | | | | | | | |
| .503 | | | | | | | | .0800 | |
| .550 | | | | .0572 | .0494 | | | | |
| .565 | | | .1837 | | | | | | |
| .600 | | | | | | | .0847 | | |
| .637 | | .1435 | | | | | | | |
| .650 | | | | | | .0482 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0140 | | | | |
| .725 | | | | .2194 | | | | | |
| .730 | | | | | | | | | -.0262 |
| .750 | | | | | | -.0372 | -.0316 | | |
| .760 | | | .2031 | | | | | | |
| .775 | | | | .2813 | .2188 | | | | |
| .798 | | .1458 | | | | | | | |
| .808 | | | .3458 | | | | | | |
| .834 | .0315 | | | | | | | | |
| .839 | | .3750 | | | | | | | |
| .850 | | | | .2973 | .2014 | -.0808 | | | |
| .857 | | | .2887 | | | | | | |
| .862 | | | | | | | | -.0443 | |
| .865 | .0829 | | | | | | | | |
| .879 | | .2711 | | | | | | | |
| .900 | .1478 | | | .2455 | | | -.0863 | | |
| .905 | | | .1732 | | | | | | |
| .919 | | .1387 | | | | | | | |
| .950 | | | | .1888 | .1698 | -.1112 | | | |
| .953 | | | .0904 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0037 | | | | | | | | |

APC97-019 1AB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 6) = 3.401 BETAO ( 2) = -4.060

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.0992 | | -.1189 | | -.1262 | | |

ALPHAO( 6) = 3.409 BETAO ( 3) = .180

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0571 | -.0036 | .2797 | .7495 | .6979 | .7240 | .7258 | .1047 | |
| .010 | -.0506 | .0112 | .2443 | .2379 | .1696 | .2524 | .3183 | | |
| .020 | -.0425 | .0249 | .2070 | .1287 | .1457 | .1552 | .1545 | .1022 | |
| .040 | | .0228 | .0973 | | | | | | |
| .050 | -.0531 | | | .0584 | .0895 | .0982 | .1183 | | |
| .069 | | | | | | | | .0837 | |
| .080 | | | | .0316 | | | | | |
| .081 | | | .0389 | | | | | | |
| .086 | | .0840 | | | | | | | |
| .094 | -.0911 | | | | | | | | |
| .150 | | | | -.0063 | .0318 | .0689 | .0877 | | |
| .157 | | | | | | | | .0687 | |
| .163 | | .0361 | | | | | | | |
| .177 | | | -.0209 | | | | | | |
| .229 | -.0158 | | | | | | | | |
| .246 | | -.0056 | | | | | | | |
| .250 | | | | -.0031 | .0157 | .0447 | .0787 | | |
| .274 | | | .0024 | | | | | | |
| .345 | | | | | | | | .0598 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0218 | | | | | | | |
| .400 | | | | -.0094 | .0021 | | .0505 | | |
| .402 | | | .0980 | | | | | | |
| .418 | | | | | | | | | .0097 |
| .497 | .0261 | | | | | | | | |
| .503 | | | | | | | | .0406 | |
| .550 | | | | .1068 | .0045 | | | | |
| .565 | | | .1384 | | | | | | |
| .600 | | | | | | | .0214 | | |
| .637 | | .1338 | | | | | | | |
| .650 | | | | | | -.0038 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1521 | | | | |
| .725 | | | | .2174 | | | | | |
| .730 | | | | | | | | | -.0547 |
| .750 | | | | | | -.0676 | -.0818 | | |

ARC97-019 TAB1 LVAP(ALUM SEALED) LEFT WING BOT. (RET.38)

ALPHAO( 8) = 3.409 BETAO ( 3) = .180

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .2028 | | | | | | |
| .775 | | | | .3266 | .2242 | | | | |
| .798 | | .1058 | | | | | | | |
| .808 | | | .2792 | | | | | | |
| .834 | -.0581 | | | | | | | | |
| .839 | | .1100 | | | | | | | |
| .850 | | | | .3039 | .2395 | -.0064 | | | |
| .857 | | | .1817 | | | | | | |
| .862 | | | | | | | | -.0604 | |
| .865 | -.0314 | | | | | | | | |
| .879 | | .0415 | | | | | | | |
| .900 | -.0410 | | | .1881 | | | -.1182 | | |
| .905 | | | .0410 | | | | | | |
| .919 | | -.0309 | | | | | | | |
| .950 | | | | .0902 | .1368 | -.0175 | | | |
| .953 | | | -.0314 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0275 | | | | | | | | |
| 1.000 | | | -.1482 | | -.1145 | | -.1300 | | |

ALPHAO( 8) = 3.415 BETAO ( 4) = 3.721

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7000 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1066 | -.0859 | .1727 | .5923 | .5855 | .5968 | .6056 | .0474 | |
| .010 | -.1028 | -.0552 | .1759 | .1680 | .1249 | .1942 | .2400 | | |
| .020 | -.0953 | -.0218 | .1492 | .0782 | .1042 | .1103 | .0984 | .0491 | |
| .040 | | -.0211 | .0662 | | | | | | |
| .050 | -.0846 | | | .0211 | .0466 | .0573 | .0857 | | |
| .060 | | | | | | | | .0349 | |
| .080 | | | | -.0033 | | | | | |
| .081 | | | .0242 | | | | | | |
| .086 | | -.0116 | | | | | | | |
| .094 | -.1035 | | | | | | | | |
| .150 | | | | -.0235 | -.0012 | .0355 | .0405 | | |
| .157 | | | | | | | | .0252 | |
| .163 | | .0378 | | | | | | | |
| .177 | | | .0060 | | | | | | |
| .229 | -.0480 | | | | | | | | |
| .248 | | .0448 | | | | | | | |
| .250 | | | | .0148 | -.0100 | .0077 | .0395 | | |
| .274 | | | .0383 | | | | | | |

ARC87-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RUTL361)

ALPHA0( 6) = 3.415 BETA0 ( 4) = 3.721

SECTION ( 11)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .0206 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0471 | | | | | | | |
| .400 | | | | .1293 | .0263 | | .0138 | | |
| .402 | | | .1337 | | | | | | |
| .418 | | | | | | | | | -.0329 |
| .497 | .0299 | | | | | | | | |
| .503 | | | | | | | | .0053 | |
| .550 | | | | .1307 | .1159 | | | | |
| .565 | | | .1235 | | | | | | |
| .600 | | | | | | | -.0040 | | |
| .637 | | .0871 | | | | | | | |
| .650 | | | | | | .0898 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1928 | | | | |
| .725 | | | | .1140 | | | | | |
| .730 | | | | | | | | | -.0839 |
| .750 | | | | | | .0671 | -.0749 | | |
| .760 | | | .0327 | | | | | | |
| .775 | | | | .2021 | .3172 | | | | |
| .798 | | -.0025 | | | | | | | |
| .808 | | | .0890 | | | | | | |
| .834 | -.0868 | | | | | | | | |
| .839 | | -.0025 | | | | | | | |
| .850 | | | | .1112 | .2482 | .0550 | | | |
| .857 | | | .0271 | | | | | | |
| .862 | | | | | | | | -.0698 | |
| .865 | -.0851 | | | | | | | | |
| .879 | | -.0011 | | | | | | | |
| .900 | -.0693 | | | .0318 | | | -.0543 | | |
| .905 | | | -.0298 | | | | | | |
| .919 | | -.0598 | | | | | | | |
| .950 | | | | -.0308 | .0235 | .0284 | | | |
| .953 | | | -.0711 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .985 | -.0357 | | | | | | | | |
| 1.000 | | | -.1387 | | -.1248 | | -.1252 | | |

ARC97-019 TAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (REFL38)

ALPHAO( 6) = 3.418 BETAO ( 5) = 6.394

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1208 | -.1044 | .1018 | .5104 | .4902 | .5320 | .5533 | .0282 | |
| .010 | -.1194 | -.0983 | .1394 | .1584 | .0979 | .1848 | .2138 | | |
| .020 | -.1123 | -.0892 | .1338 | .0859 | .0934 | .0894 | .0820 | .0342 | |
| .040 | | -.0597 | .0816 | | | | | | |
| .050 | -.1144 | | | .0239 | .0375 | .0448 | .0489 | | |
| .069 | | | | | | | | .0232 | |
| .080 | | | | .0034 | | | | | |
| .081 | | | .0415 | | | | | | |
| .086 | | -.0213 | | | | | | | |
| .094 | -.1155 | | | | | | | | |
| .150 | | | | .0055 | .0037 | .0343 | .0301 | | |
| .157 | | | | | | | | .0168 | |
| .163 | | .0392 | | | | | | | |
| .177 | | | .0150 | | | | | | |
| .229 | -.0600 | | | | | | | | |
| .246 | | .0576 | | | | | | | |
| .250 | | | | .0180 | .0094 | .0158 | .0374 | | |
| .274 | | | .0362 | | | | | | |
| .345 | | | | | | | | .0148 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0439 | | | | | | | |
| .400 | | | | .1420 | .0950 | | .0221 | | |
| .402 | | | .1181 | | | | | | |
| .418 | | | | | | | | | -.0490 |
| .497 | .0168 | | | | | | | | |
| .503 | | | | | | | | .0032 | |
| .550 | | | | .1587 | .2091 | | | | |
| .565 | | | .1320 | | | | | | |
| .600 | | | | | | | .0381 | | |
| .637 | | .1241 | | | | | | | |
| .650 | | | | | | .1695 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1128 | | | | |
| .725 | | | | .0650 | | | | | |
| .730 | | | | | | | | | -.0981 |
| .750 | | | | | | .0468 | .0381 | | |
| .760 | | | -.0158 | | | | | | |
| .775 | | | | .1239 | .2328 | | | | |
| .798 | | -.0135 | | | | | | | |
| .808 | | | .0309 | | | | | | |
| .834 | -.0814 | | | | | | | | |
| .839 | | -.0218 | | | | | | | |
| .850 | | | | .0579 | .1114 | .0062 | | | |
| .857 | | | -.0195 | | | | | | |
| .882 | | | | | | | | -.0479 | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 6) = 3.418 BETAO ( 5) = 6.394

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.0496 | | | | | | | | |
| .875 | | -.0652 | | | | | | | |
| .900 | -.0710 | | | -.0075 | | | -.0207 | | |
| .905 | | | -.0720 | | | | | | |
| .919 | | -.0965 | | | | | | | |
| .950 | | | | -.0599 | -.0379 | -.0233 | | | |
| .953 | | | -.1100 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0398 | | | | | | | | |
| 1.000 | | | -.1452 | | -.1422 | | -.1305 | | |

ALPHAO( 7) = 6.122 BETAO ( 1) = -4.040

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0447 | .0268 | .4012 | .9141 | .8757 | .8469 | .8664 | .1905 | |
| .010 | -.0449 | .0397 | .3669 | .3492 | .3032 | .3917 | .4702 | | |
| .020 | -.0307 | .0415 | .3094 | .2248 | .3048 | .3004 | .2961 | .2005 | |
| .040 | | .0422 | .1489 | | | | | | |
| .050 | -.0488 | | | .1381 | .1982 | .2205 | .2458 | | |
| .069 | | | | | | | | .1781 | |
| .080 | | | | .1028 | | | | | |
| .081 | | | .1131 | | | | | | |
| .088 | | .0902 | | | | | | | |
| .094 | .0405 | | | | | | | | |
| .150 | | | | .0730 | .1191 | .1690 | .2009 | | |
| .157 | | | | | | | | .1572 | |
| .163 | | .1417 | | | | | | | |
| .177 | | | .0437 | | | | | | |
| .229 | -.0189 | | | | | | | | |
| .248 | | .0505 | | | | | | | |
| .250 | | | | .0733 | .1079 | .1446 | .1778 | | |
| .274 | | | .0490 | | | | | | |
| .345 | | | | | | | | .1380 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0214 | | | | | | | |
| .400 | | | | .0671 | .1039 | | .1451 | | |
| .402 | | | .0423 | | | | | | |
| .418 | | | | | | | | | .0255 |
| .497 | .0402 | | | | | | | | |
| .503 | | | | | | | | .1124 | |
| .550 | | | | .0622 | .1025 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 7) = 6.122 BETAO ( 1) = -4.040

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .1990 | | | | | | |
| .600 | | | | | | | .1084 | | |
| .637 | | .1655 | | | | | | | |
| .650 | | | | | | .0993 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0643 | | | | |
| .725 | | | | .3225 | | | | | |
| .730 | | | | | | | | | -.0818 |
| .750 | | | | | | .0005 | -.0011 | | |
| .760 | | | .3508 | | | | | | |
| .775 | | | | .3841 | .2775 | | | | |
| .798 | | .4367 | | | | | | | |
| .808 | | | .3760 | | | | | | |
| .834 | .0791 | | | | | | | | |
| .839 | | .3100 | | | | | | | |
| .850 | | | | .3294 | .2552 | -.0505 | | | |
| .857 | | | .2642 | | | | | | |
| .862 | | | | | | | | -.0397 | |
| .865 | .1773 | | | | | | | | |
| .879 | | .1378 | | | | | | | |
| .900 | .1238 | | | .2297 | | | -.0725 | | |
| .905 | | | .1219 | | | | | | |
| .919 | | .0315 | | | | | | | |
| .950 | | | | .1489 | .2295 | -.0406 | | | |
| .953 | | | .0349 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0170 | | | | | | | | |
| 1.000 | | | -.1165 | | -.1301 | | -.1248 | | |

ALPHAO( 7) = 6.128 BETAO ( 2) = -1.890

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0664 | -.0015 | .3360 | .8315 | .8125 | .6.85 | .7869 | .1542 | |
| .010 | -.0548 | .0167 | .3157 | .3131 | .2627 | .3868 | .4181 | | |
| .020 | -.0571 | .0167 | .2689 | .2010 | .2678 | .2892 | .2579 | .1667 | |
| .040 | | .0157 | .1424 | | | | | | |
| .050 | -.0135 | | | .1201 | .1750 | .2014 | .2122 | | |
| .069 | | | | | | | | .1489 | |
| .080 | | | | .0895 | | | | | |
| .081 | | | .0915 | | | | | | |
| .086 | | .1041 | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT, (RETL38)

ALPHAO( 7) = 8.128 BETAO ( 2) = -1.890

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | .0348 | | | | | | | | |
| .150 | | | | .0513 | .1010 | .1444 | .1724 | | |
| .157 | | | | | | | | .1315 | |
| .163 | | .0975 | | | | | | | |
| .177 | | | .0168 | | | | | | |
| .223 | .0032 | | | | | | | | |
| .248 | | .0217 | | | | | | | |
| .250 | | | | .0371 | .0870 | .1210 | .1503 | | |
| .274 | | | .0228 | | | | | | |
| .345 | | | | | | | | .1130 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0329 | | | | | | | |
| .400 | | | | .0291 | .0622 | | .1197 | | |
| .402 | | | .0249 | | | | | | |
| .418 | | | | | | | | | -.0003 |
| .497 | .0234 | | | | | | | | |
| .503 | | | | | | | | .0909 | |
| .550 | | | | .1485 | .0695 | | | | |
| .565 | | | .1529 | | | | | | |
| .600 | | | | | | | .0841 | | |
| .637 | | .1585 | | | | | | | |
| .650 | | | | | | .0594 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2212 | | | | |
| .725 | | | | .3173 | | | | | |
| .730 | | | | | | | | | -.0966 |
| .750 | | | | | | -.0243 | -.0215 | | |
| .760 | | | .3227 | | | | | | |
| .775 | | | | .3513 | .2719 | | | | |
| .798 | | .3485 | | | | | | | |
| .808 | | | .3595 | | | | | | |
| .834 | .0681 | | | | | | | | |
| .839 | | .2458 | | | | | | | |
| .850 | | | | .2624 | .2715 | -.0080 | | | |
| .857 | | | .2231 | | | | | | |
| .862 | | | | | | | | -.0504 | |
| .865 | .1401 | | | | | | | | |
| .879 | | .1198 | | | | | | | |
| .900 | .0849 | | | .1705 | | | -.0920 | | |
| .905 | | | .0891 | | | | | | |
| .919 | | .0203 | | | | | | | |
| .950 | | | | .0898 | .1400 | -.0105 | | | |
| .953 | | | .0091 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0223 | | | | | | | | |

ARC97-019 !AB! LVAP(ALL-L WEALED) LEFT WING BOT. (RETL38)

ALPHAO( 7) = 8.128 BETAO ( 2) = -1.890

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1351 | | -.1385 | | -.1311 | | |

ALPHAO( 7) = 8.130 BETAO ( 3) = .192

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0754 | -.0194 | .3038 | .7733 | .7182 | .7416 | .7516 | .1348 | |
| .010 | -.0687 | .0035 | .3037 | .2836 | .2201 | .3250 | .3953 | | |
| .020 | -.0613 | .0091 | .2668 | .1763 | .2278 | .2345 | .2403 | .1476 | |
| .040 | | .0091 | .1427 | | | | | | |
| .050 | -.0684 | | | .1002 | .1373 | .1594 | .1942 | | |
| .069 | | | | | | | | .1305 | |
| .080 | | | | .0683 | | | | | |
| .081 | | | .0545 | | | | | | |
| .086 | | .0621 | | | | | | | |
| .094 | -.0499 | | | | | | | | |
| .150 | | | | .0221 | .0727 | .1168 | .1499 | | |
| .157 | | | | | | | | .1152 | |
| .163 | | .0828 | | | | | | | |
| .177 | | | .0134 | | | | | | |
| .229 | -.0003 | | | | | | | | |
| .246 | | .0135 | | | | | | | |
| .250 | | | | .0259 | .0517 | .0921 | .1287 | | |
| .274 | | | -.0031 | | | | | | |
| .345 | | | | | | | | .0998 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0338 | | | | | | | |
| .400 | | | | .0068 | .0342 | | .0992 | | |
| .402 | | | .1125 | | | | | | |
| .418 | | | | | | | | | -.0168 |
| .497 | .0565 | | | | | | | | |
| .503 | | | | | | | | .0788 | |
| .550 | | | | .1593 | .0377 | | | | |
| .565 | | | .1909 | | | | | | |
| .600 | | | | | | | .0838 | | |
| .637 | | .1862 | | | | | | | |
| .650 | | | | | | .0414 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2495 | | | | |
| .725 | | | | .3415 | | | | | |
| .730 | | | | | | | | | -.1082 |
| .750 | | | | | | .0480 | -.0339 | | |

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ARC57-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 7) = 8.130 BETAO ( 3) = .192

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .2334 | | | | | | |
| .775 | | | | .4518 | .3730 | | | | |
| .798 | | .1416 | | | | | | | |
| .808 | | | .3075 | | | | | | |
| .834 | -.0322 | | | | | | | | |
| .839 | | .1135 | | | | | | | |
| .850 | | | | .3110 | .2957 | .0685 | | | |
| .857 | | | .1596 | | | | | | |
| .862 | | | | | | | | -.0560 | |
| .865 | .0047 | | | | | | | | |
| .879 | | .0331 | | | | | | | |
| .900 | -.0290 | | | .1692 | | | -.0980 | | |
| .905 | | | .0345 | | | | | | |
| .919 | | -.0388 | | | | | | | |
| .950 | | | | .0640 | .1045 | .0311 | | | |
| .953 | | | -.0383 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0338 | | | | | | | | |
| 1.000 | | | -.1581 | | -.1460 | | -.1247 | | |

ALPHAO( 7) = 6.133 BETAO ( 4) = 2.291

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VAPIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0908 | -.0415 | .2626 | .6806 | .6683 | .6905 | .6971 | .1068 | |
| .010 | -.0847 | -.0148 | .2594 | .2338 | .2003 | .2813 | .3571 | | |
| .020 | -.0791 | .0004 | .2179 | .1344 | .1974 | .1978 | .2044 | .1210 | |
| .040 | | .0081 | .0959 | | | | | | |
| .050 | -.0741 | | | .0624 | .1125 | .1317 | .1621 | | |
| .069 | | | | | | | | .1057 | |
| .080 | | | | .0384 | | | | | |
| .081 | | | .0340 | | | | | | |
| .086 | | .0465 | | | | | | | |
| .094 | -.1084 | | | | | | | | |
| .150 | | | | .0044 | .0486 | .0978 | .1227 | | |
| .157 | | | | | | | | .0929 | |
| .163 | | .0588 | | | | | | | |
| .177 | | | .0090 | | | | | | |
| .229 | -.0067 | | | | | | | | |
| .246 | | .0224 | | | | | | | |
| .250 | | | | .0065 | .0279 | .0705 | .1075 | | |
| .274 | | | .0168 | | | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 7) = 8.133 BETAO ( 4) = 2.291

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .0778 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0543 | | | | | | | |
| .400 | | | | .0645 | .0214 | | .0793 | | |
| .402 | | | .1240 | | | | | | |
| .418 | | | | | | | | | -.0375 |
| .497 | .0461 | | | | | | | | |
| .503 | | | | | | | | .0583 | |
| .550 | | | | .2255 | .1269 | | | | |
| 565 | | | .1807 | | | | | | |
| .600 | | | | | | | .0498 | | |
| .637 | | .1649 | | | | | | | |
| .650 | | | | | | .0634 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3043 | | | | |
| .725 | | | | .2978 | | | | | |
| .730 | | | | | | | | | -.1204 |
| .750 | | | | | | .1259 | -.0417 | | |
| .760 | | | .1348 | | | | | | |
| .775 | | | | .3562 | .4685 | | | | |
| .798 | | .0589 | | | | | | | |
| .808 | | | .1582 | | | | | | |
| .834 | -.0870 | | | | | | | | |
| .839 | | .0448 | | | | | | | |
| .850 | | | | .2139 | .2921 | .0982 | | | |
| .857 | | | .0597 | | | | | | |
| .862 | | | | | | | | -.0617 | |
| .865 | -.0378 | | | | | | | | |
| .879 | | -.0071 | | | | | | | |
| .900 | -.0305 | | | .0950 | | | -.0321 | | |
| .905 | | | -.0244 | | | | | | |
| .919 | | -.0405 | | | | | | | |
| .950 | | | | .0090 | .0587 | .0584 | | | |
| .953 | | | -.0733 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0429 | | | | | | | | |
| 1.000 | | | -.1591 | | -.1292 | | -.1128 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 7) = 6.138 BETAO ( 5) = 3.707

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1174 | -.0860 | .2082 | .8225 | .6256 | .6425 | .6398 | .0820 | |
| .010 | -.1123 | -.0389 | .2162 | .2029 | .1708 | .2618 | .3114 | | |
| .020 | -.1070 | -.0119 | .1898 | .1115 | .1673 | .1790 | .1728 | .0989 | |
| .040 | | -.0070 | .0858 | | | | | | |
| .050 | -.0914 | | | .0433 | .0915 | .1151 | .1346 | | |
| .069 | | | | | | | | .0859 | |
| .080 | | | | .0207 | | | | | |
| .081 | | | .0197 | | | | | | |
| .086 | | .0029 | | | | | | | |
| .094 | -.1169 | | | | | | | | |
| .150 | | | | -.0054 | .0337 | .0761 | .1034 | | |
| .157 | | | | | | | | .0748 | |
| .163 | | .0584 | | | | | | | |
| .177 | | | .0120 | | | | | | |
| .229 | -.0076 | | | | | | | | |
| .246 | | .0331 | | | | | | | |
| .250 | | | | .0468 | .0221 | .0562 | .0923 | | |
| .274 | | | .0791 | | | | | | |
| .345 | | | | | | | | .0631 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1079 | | | | | | | |
| .400 | | | | .1518 | .0709 | | .0684 | | |
| .402 | | | .1568 | | | | | | |
| .418 | | | | | | | | | -.0574 |
| .497 | .0478 | | | | | | | | |
| .503 | | | | | | | | .0453 | |
| .550 | | | | .2454 | .2760 | | | | |
| .585 | | | .1849 | | | | | | |
| .600 | | | | | | | .0457 | | |
| .637 | | .1539 | | | | | | | |
| .650 | | | | | | .2344 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1938 | | | | |
| .725 | | | | .1438 | | | | | |
| .730 | | | | | | | | | -.1307 |
| .750 | | | | | | .1190 | .0300 | | |
| .760 | | | .0457 | | | | | | |
| .775 | | | | .2482 | .4210 | | | | |
| .798 | | .0082 | | | | | | | |
| .808 | | | .0928 | | | | | | |
| .834 | -.0690 | | | | | | | | |
| .839 | | .0228 | | | | | | | |
| .850 | | | | .1164 | .2357 | .1020 | | | |
| .857 | | | .0287 | | | | | | |
| .862 | | | | | | | | -.0574 | |

ARC97-019 (A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL38)

ALPHAO( 7) = 8.138 BETAO ( 5) = 3.707

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.0417 | | | | | | | | |
| .879 | | .0015 | | | | | | | |
| .900 | -.0598 | | | .0288 | | | .0293 | | |
| .905 | | | -.0302 | | | | | | |
| .919 | | -.0655 | | | | | | | |
| .950 | | | | -.0354 | .0056 | .0239 | | | |
| .953 | | | -.0738 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0400 | | | | | | | | |
| 1.000 | | | -.1497 | | -.1279 | | -.1173 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL39) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2880.0000 SQ.FT. XMRP = 978.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.550 RN/FT = 2.500
ELV-IB = .000 ELV-OB = .000
RUDDER = .000 SPDBRK = .000

ALPHA0( 1) = -6.293 BETA0 ( 1) = .408

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0093 | -.0230 | .2089 | .4892 | .4344 | .3997 | .4322 | -.3668 | |
| .010 | .0230 | -.0547 | .0015 | -.2380 | -.3450 | -.2501 | -.2458 | | |
| .020 | .0276 | -.0900 | -.0599 | -.3429 | -.3866 | -.3993 | -.3964 | -.3633 | |
| .040 | | -.0736 | -.1687 | | | | | | |
| .050 | -.0547 | | | -.3374 | -.4091 | -.4361 | -.4303 | | |
| .069 | | | | | | | | -.3656 | |
| .080 | | | | -.3161 | | | | | |
| .081 | | | -.1021 | | | | | | |
| .086 | | -.0182 | | | | | | | |
| .094 | .0023 | | | | | | | | |
| .150 | | | | -.2441 | -.3713 | -.3888 | -.3799 | | |
| .157 | | | | | | | | -.3593 | |
| .163 | | .0183 | | | | | | | |
| .177 | | | -.0932 | | | | | | |
| .229 | -.1522 | | | | | | | | |
| .246 | | -.0523 | | | | | | | |
| .250 | | | | -.1941 | -.3368 | -.3687 | -.3606 | | |
| .274 | | | -.1638 | | | | | | |
| .345 | | | | | | | | -.3104 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0501 | | | | | | | |
| .400 | | | | .0415 | -.0150 | | -.3031 | | |
| .402 | | | .0780 | | | | | | |
| .418 | | | | | | | | | -.2807 |
| .497 | -.0514 | | | | | | | | |
| .503 | | | | | | | | -.3045 | |
| .550 | | | | .1214 | .1073 | | | | |
| .565 | | | .1355 | | | | | | |
| .600 | | | | | | | -.2414 | | |
| .637 | | .1438 | | | | | | | |
| .650 | | | | | | .1038 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1021 | | | | |
| .725 | | | | .0698 | | | | | |
| .730 | | | | | | | | | -.1992 |
| .750 | | | | | | .0533 | -.2338 | | |
| .760 | | | -.0498 | | | | | | |
| .775 | | | | -.0492 | -.0147 | | | | |

ARC97-019 TAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL39)

ALPHAO( 1) = -8.293 BETAO ( 1) = .406

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .798 | | -.1432 | | | | | | | |
| .808 | | | -.1815 | | | | | | |
| .834 | -.2210 | | | | | | | | |
| .839 | | -.2159 | | | | | | | |
| .850 | | | | -.2115 | -.1682 | -.0837 | | | |
| .857 | | | -.2818 | | | | | | |
| .862 | | | | | | | | -.2648 | |
| .865 | -.2003 | | | | | | | | |
| .879 | | -.2433 | | | | | | | |
| .900 | -.2372 | | | -.3033 | | | -.1038 | | |
| .905 | | | -.3390 | | | | | | |
| .919 | | -.3185 | | | | | | | |
| .950 | | | | -.3717 | -.2195 | -.1901 | | | |
| .953 | | | -.3743 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.3195 | | | | | | | | |
| 1.000 | | | -.2478 | | -.2208 | | -.2685 | | |

ALPHAO( 2) = -4.229 BETAO ( 1) = -3.806

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0417 | .0289 | .3169 | .8671 | .6157 | .5858 | .6054 | -.2564 | |
| .010 | .1070 | .0018 | .1234 | -.0974 | -.2158 | -.1481 | -.1184 | | |
| .020 | .0826 | -.0534 | .0603 | -.2206 | -.2693 | -.3057 | -.3071 | -.3766 | |
| .040 | | -.0599 | .0172 | | | | | | |
| .050 | -.0093 | | | -.2365 | -.2980 | -.3380 | -.3407 | | |
| .069 | | | | | | | | -.3949 | |
| .080 | | | | -.2142 | | | | | |
| .081 | | | -.0352 | | | | | | |
| .086 | | .0499 | | | | | | | |
| .094 | .0533 | | | | | | | | |
| .150 | | | | -.2110 | -.2738 | -.2980 | -.3195 | | |
| .157 | | | | | | | | -.3844 | |
| .163 | | .1158 | | | | | | | |
| .177 | | | -.0686 | | | | | | |
| .229 | -.0713 | | | | | | | | |
| .246 | | -.1063 | | | | | | | |
| .250 | | | | -.1124 | -.2355 | -.2682 | -.2858 | | |
| .274 | | | -.1314 | | | | | | |
| .345 | | | | | | | | -.3805 | |
| .362 | .0000 | | | | | | | | |

REPRODUCIBILITY

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL39)

ALPHAO( 2) = -4.229 BETAO ( 1) = -3.806

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .390 | | -.0172 | | | | | | | |
| .400 | | | | .0536 | -.1482 | | -.2466 | | |
| .402 | | | .0948 | | | | | | |
| .418 | | | | | | | | | -.3448 |
| .497 | .0050 | | | | | | | | |
| .503 | | | | | | | | -.2998 | |
| .550 | | | | .2414 | .2015 | | | | |
| .565 | | | .2405 | | | | | | |
| .600 | | | | | | | -.1270 | | |
| .637 | | .2585 | | | | | | | |
| .650 | | | | | | .1480 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1845 | | | | |
| .725 | | | | .1740 | | | | | |
| .730 | | | | | | | | | -.3403 |
| .750 | | | | | | .1457 | -.1182 | | |
| .760 | | | .0518 | | | | | | |
| .775 | | | | .0424 | .0571 | | | | |
| .798 | | -.0507 | | | | | | | |
| .808 | | | -.1097 | | | | | | |
| .834 | -.1575 | | | | | | | | |
| .839 | | -.1889 | | | | | | | |
| .850 | | | | -.1333 | -.1278 | -.0149 | | | |
| .857 | | | -.2330 | | | | | | |
| .862 | | | | | | | | -.2112 | |
| .865 | -.1888 | | | | | | | | |
| .879 | | -.2450 | | | | | | | |
| .900 | -.1941 | | | -.2294 | | | .0050 | | |
| .905 | | | -.3233 | | | | | | |
| .919 | | -.2987 | | | | | | | |
| .950 | | | | -.3135 | -.1852 | -.1409 | | | |
| .953 | | | -.3567 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.3170 | | | | | | | | |
| 1.000 | | | -.2489 | | -.1347 | | -.2639 | | |

ARC97-019 (A81 LVAP(ALLHL SEALED) LEFT MIND BOT. (RETL39)

ALPHA0( 2) = -4.810 BETA0 ( 2) = .382

SECTION ( 1)LEFT MIND BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CN | | | | | | | | | |
| .000 | -.0498 | -.0452 | .2347 | .5291 | .5054 | .4644 | .4789 | -.3219 | |
| .010 | .0017 | -.0585 | .0538 | -.1496 | -.2766 | -.2096 | -.1814 | | |
| .020 | .0252 | -.0994 | -.0090 | -.2623 | -.3227 | -.3577 | -.3499 | -.3844 | |
| .040 | | -.0809 | -.1158 | | | | | | |
| .050 | -.0582 | | | -.2585 | -.3550 | -.3907 | -.3829 | | |
| .069 | | | | | | | | -.3985 | |
| .080 | | | | -.2470 | | | | | |
| .081 | | | -.0703 | | | | | | |
| .086 | | -.0079 | | | | | | | |
| .094 | .0085 | | | | | | | | |
| .150 | | | | -.2018 | -.3111 | -.3293 | -.3538 | | |
| .157 | | | | | | | | -.3942 | |
| .163 | | .0187 | | | | | | | |
| .177 | | | -.0648 | | | | | | |
| .229 | -.1435 | | | | | | | | |
| .246 | | -.0333 | | | | | | | |
| .250 | | | | -.1742 | -.2834 | -.3218 | -.2996 | | |
| .274 | | | -.1567 | | | | | | |
| .345 | | | | | | | | -.3585 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0452 | | | | | | | |
| .400 | | | | .1002 | .1044 | | -.2410 | | |
| .402 | | | .1141 | | | | | | |
| .418 | | | | | | | | | -.3727 |
| .497 | -.0480 | | | | | | | | |
| .503 | | | | | | | | -.2798 | |
| .550 | | | | .2134 | .1980 | | | | |
| .565 | | | .2063 | | | | | | |
| .600 | | | | | | | -.1068 | | |
| .637 | | .2009 | | | | | | | |
| .650 | | | | | | .1812 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1629 | | | | |
| .725 | | | | .1136 | | | | | |
| .730 | | | | | | | | | -.1802 |
| .750 | | | | | | .0892 | .1334 | | |
| .760 | | | -.0252 | | | | | | |
| .775 | | | | -.0138 | .0181 | | | | |
| .798 | | -.1320 | | | | | | | |
| .808 | | | -.1684 | | | | | | |
| .834 | -.2282 | | | | | | | | |
| .839 | | -.2488 | | | | | | | |
| .850 | | | | -.1904 | -.1838 | -.0609 | | | |
| .857 | | | -.2730 | | | | | | |
| .862 | | | | | | | | -.2400 | |

ARC97-019 1A81 EVAP(ALLHL SEALED) LEFT WING BOT. (RETL39)

ALPHAO( 2) = -4.210 BETAO ( 2) = .382

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.2275 | | | | | | | | |
| .879 | | -.2558 | | | | | | | |
| .900 | -.2422 | | | -.2885 | | | -.0780 | | |
| .905 | | | -.3588 | | | | | | |
| .919 | | -.3152 | | | | | | | |
| .950 | | | | -.3621 | -.2301 | -.1778 | | | |
| .953 | | | -.3821 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.3226 | | | | | | | | |
| 1.000 | | | -.2659 | | -.2183 | | -.2538 | | |

ALPHAO( 2) = -4.235 BETAO ( 3) = 3.933

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0963 | -.0895 | .1866 | .4285 | .4574 | .4301 | .4822 | -.1478 | |
| .010 | -.0920 | -.0762 | .0877 | -.2205 | -.3139 | -.2164 | -.1690 | | |
| .020 | -.0878 | -.0498 | .0435 | -.3322 | -.3479 | -.2098 | -.1661 | -.1232 | |
| .040 | | -.0414 | -.0837 | | | | | | |
| .050 | -.1122 | | | -.2841 | -.3280 | -.1811 | -.1729 | | |
| .069 | | | | | | | | -.1222 | |
| .080 | | | | -.2638 | | | | | |
| .081 | | | -.1078 | | | | | | |
| .086 | | -.0414 | | | | | | | |
| .094 | -.0843 | | | | | | | | |
| .150 | | | | -.0793 | -.1043 | -.1732 | -.1391 | | |
| .157 | | | | | | | | -.0949 | |
| .163 | | -.0565 | | | | | | | |
| .177 | | | -.0157 | | | | | | |
| .229 | -.0806 | | | | | | | | |
| .246 | | .0205 | | | | | | | |
| .250 | | | | .3073 | .2298 | -.0920 | -.0860 | | |
| .274 | | | .0820 | | | | | | |
| .345 | | | | | | | | -.1333 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1103 | | | | | | | |
| .406 | | | | .2308 | .1395 | | -.0786 | | |
| .402 | | | 2575 | | | | | | |
| .418 | | | | | | | | | -.0744 |
| .487 | .0588 | | | | | | | | |
| .503 | | | | | | | | -.0759 | |
| .550 | | | | .1219 | .0820 | | | | |

ARC97 019 (AB) (VARIABLE SEALED) LEFT WING BOT. (REV1.2)

ALPHAO( 2) = -4.235 BETAO ( 3) = 3.933

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .1562 | | | | | | |
| .600 | | | | | | | -.0482 | | |
| .637 | | .1523 | | | | | | | |
| .650 | | | | | | .1738 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1268 | | | | |
| .725 | | | | .0091 | | | | | |
| .730 | | | | | | | | | -.1076 |
| .750 | | | | | | .0492 | .0687 | | |
| .760 | | | -.1497 | | | | | | |
| .775 | | | | -.0917 | -.0445 | | | | |
| .798 | | -.2037 | | | | | | | |
| .808 | | | -.2208 | | | | | | |
| .834 | -.1951 | | | | | | | | |
| .839 | | -.1957 | | | | | | | |
| .850 | | | | -.2439 | -.1578 | -.1034 | | | |
| .857 | | | -.2425 | | | | | | |
| .862 | | | | | | | | -.1336 | |
| .865 | -.2003 | | | | | | | | |
| .879 | | -.2371 | | | | | | | |
| .900 | -.1951 | | | -.3235 | | | -.1170 | | |
| .905 | | | -.3079 | | | | | | |
| .919 | | -.2653 | | | | | | | |
| .950 | | | | -.3759 | -.2623 | -.2171 | | | |
| .953 | | | -.3259 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.3737 | | | | | | | | |
| 1.000 | | | -.1307 | | -.2858 | | -.2069 | | |

ALPHAO( 3) = -.028 BETAO ( 1) = -5.881

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0779 | .0053 | .3773 | .7738 | .7501 | .7289 | .7390 | -.0301 | |
| .010 | .0394 | .0599 | .2710 | .0688 | -.0425 | .0037 | .1002 | | |
| .020 | .0414 | .0009 | .2046 | -.0580 | -.0790 | -.1063 | -.1297 | -.0825 | |
| .040 | | .0000 | .0774 | | | | | | |
| .050 | .0875 | | | -.0405 | -.0883 | -.1209 | -.1488 | | |
| .069 | | | | | | | | -.1162 | |
| .080 | | | | -.0808 | | | | | |
| .081 | | | .0503 | | | | | | |
| .086 | | .1098 | | | | | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL39)

ALPHAO( 3) = -.028 BETAO ( 1) = -5.881

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | .1511 | | | | | | | | |
| .150 | | | | -.0570 | -.0874 | -.0879 | -.1005 | | |
| .157 | | | | | | | | -.0799 | |
| .163 | | .1530 | | | | | | | |
| .177 | | | .0242 | | | | | | |
| .229 | -.0293 | | | | | | | | |
| .246 | | -.0523 | | | | | | | |
| .250 | | | | -.0042 | -.0259 | -.0199 | -.0428 | | |
| .274 | | | -.0311 | | | | | | |
| .345 | | | | | | | | -.0509 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0847 | | | | | | | |
| .400 | | | | .3453 | .2526 | | .0423 | | |
| .402 | | | .3002 | | | | | | |
| .418 | | | | | | | | | -.0627 |
| .497 | .0831 | | | | | | | | |
| .503 | | | | | | | | .1416 | |
| .550 | | | | .4797 | .4827 | | | | |
| .565 | | | .4989 | | | | | | |
| .600 | | | | | | | .2859 | | |
| .637 | | .5147 | | | | | | | |
| .650 | | | | | | .3696 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2700 | | | | |
| .725 | | | | .2381 | | | | | |
| .730 | | | | | | | | | -.0808 |
| .750 | | | | | | .1815 | .1847 | | |
| .760 | | | .1187 | | | | | | |
| .775 | | | | .1031 | .1025 | | | | |
| .798 | | .0125 | | | | | | | |
| .808 | | | -.0545 | | | | | | |
| .834 | -.1286 | | | | | | | | |
| .839 | | -.1577 | | | | | | | |
| .850 | | | | -.0787 | -.0938 | .0265 | | | |
| .857 | | | -.1806 | | | | | | |
| .862 | | | | | | | | -.0151 | |
| .865 | -.1633 | | | | | | | | |
| .879 | | -.2555 | | | | | | | |
| .900 | -.1668 | | | -.1878 | | | .0027 | | |
| .905 | | | -.2883 | | | | | | |
| .919 | | -.2870 | | | | | | | |
| .950 | | | | -.2849 | -.2077 | -.1274 | | | |
| .953 | | | -.3542 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2722 | | | | | | | | |

ARC97-019 TAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL39)

ALPHAO( 3) = -.028 BETAO ( 1) = -5.881

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.2349 | | -.1670 | | -.2448 | | |

ALPHAO( 3) = -.024 BETAO ( 2) = -3.844

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0323 | .0154 | .3410 | .7272 | .7091 | .6840 | .6934 | -.0583 | |
| .010 | .1150 | .0337 | .2693 | .0401 | -.0665 | -.0219 | .0711 | | |
| .020 | .1141 | .0215 | .2464 | -.0876 | -.1066 | -.1274 | -.1481 | -.1077 | |
| .040 | | .0469 | .1418 | | | | | | |
| .050 | .0179 | | | -.0748 | -.1171 | -.1459 | -.1669 | | |
| .069 | | | | | | | | -.1360 | |
| .080 | | | | - 1099 | | | | | |
| .081 | | | -.0108 | | | | | | |
| .086 | | .0547 | | | | | | | |
| .094 | .0663 | | | | | | | | |
| .150 | | | | -.1124 | -.1062 | -.1063 | -.1219 | | |
| .157 | | | | | | | | -.1032 | |
| .163 | | .1449 | | | | | | | |
| .177 | | | -.0273 | | | | | | |
| .229 | .0192 | | | | | | | | |
| .246 | | -.0820 | | | | | | | |
| .250 | | | | -.0217 | -.0559 | -.0976 | -.0871 | | |
| .274 | | | -.0520 | | | | | | |
| .345 | | | | | | | | -.0858 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0568 | | | | | | | |
| .400 | | | | .2755 | .0818 | | -.0010 | | |
| .402 | | | .2505 | | | | | | |
| .418 | | | | | | | | | -.0939 |
| .497 | .0158 | | | | | | | | |
| .503 | | | | | | | | .0878 | |
| .550 | | | | .4498 | .4758 | | | | |
| .565 | | | .4393 | | | | | | |
| .600 | | | | | | | .2302 | | |
| .637 | | .4328 | | | | | | | |
| .650 | | | | | | .3869 | | | |
| .870 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2621 | | | | |
| .725 | | | | .2260 | | | | | |
| .730 | | | | | | | | | -.0948 |
| .750 | | | | | | .1635 | .1656 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL39)

ALPHAO( 3) = -.024 BETAO ( 2) = -3.844

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .1034 | | | | | | |
| .775 | | | | .0900 | .0922 | | | | |
| .798 | | -.0086 | | | | | | | |
| .808 | | | -.0888 | | | | | | |
| .834 | -.1833 | | | | | | | | |
| .839 | | -.1785 | | | | | | | |
| .850 | | | | -.0978 | -.1157 | .0150 | | | |
| .857 | | | -.1932 | | | | | | |
| .862 | | | | | | | | -.0318 | |
| .865 | -.2002 | | | | | | | | |
| .879 | | -.2886 | | | | | | | |
| .900 | -.2047 | | | -.1979 | | | -.0095 | | |
| .905 | | | -.2970 | | | | | | |
| .919 | | -.2989 | | | | | | | |
| .950 | | | | -.2919 | -.2196 | -.1384 | | | |
| .953 | | | -.3638 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2854 | | | | | | | | |
| 1.000 | | | -.2629 | | -.1583 | | -.2560 | | |

ALPHAO( 3) = -.022 BETAO ( 3) = .347

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0628 | -.0988 | .2574 | .6219 | .6199 | .5980 | .6051 | -.1224 | |
| .010 | -.0164 | -.0930 | .1880 | -.0131 | -.1199 | -.0747 | .0117 | | |
| .020 | .0240 | -.0645 | .2196 | -.1222 | -.1502 | -.1777 | -.1900 | -.1607 | |
| .040 | | -.0138 | .1099 | | | | | | |
| .050 | -.0649 | | | -.1033 | -.1563 | -.1995 | -.2104 | | |
| .069 | | | | | | | | -.1373 | |
| .080 | | | | -.1267 | | | | | |
| .081 | | | -.0447 | | | | | | |
| .086 | | -.0135 | | | | | | | |
| .094 | .0237 | | | | | | | | |
| .150 | | | | -.0191 | -.1071 | -.1312 | -.1684 | | |
| .157 | | | | | | | | -.1140 | |
| .163 | | .0937 | | | | | | | |
| .177 | | | .0129 | | | | | | |
| .229 | -.0775 | | | | | | | | |
| .248 | | .0071 | | | | | | | |
| .250 | | | | -.0451 | -.0752 | -.0837 | -.1147 | | |
| .274 | | | .0852 | | | | | | |

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL39)

ALPHAO( 3) = -.022 BETAO ( 3) = .347

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .0356 | |
| .382 | .0000 | | | | | | | | |
| .390 | | .1571 | | | | | | | |
| .400 | | | | .2780 | .2525 | | .0625 | | |
| .402 | | | .2727 | | | | | | |
| .418 | | | | | | | | | -.0503 |
| .497 | .0654 | | | | | | | | |
| .503 | | | | | | | | .1003 | |
| .550 | | | | .3078 | .4179 | | | | |
| .565 | | | .2914 | | | | | | |
| .600 | | | | | | | .3294 | | |
| .637 | | .2828 | | | | | | | |
| .650 | | | | | | .2923 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2171 | | | | |
| .725 | | | | .1480 | | | | | |
| .730 | | | | | | | | | -.3019 |
| .750 | | | | | | .1175 | .1397 | | |
| .760 | | | .0212 | | | | | | |
| .775 | | | | .0207 | .0418 | | | | |
| .798 | | -.0859 | | | | | | | |
| .808 | | | -.1348 | | | | | | |
| .834 | -.2242 | | | | | | | | |
| .839 | | -.2314 | | | | | | | |
| .850 | | | | -.1811 | -.1548 | -.0319 | | | |
| .857 | | | -.2440 | | | | | | |
| .862 | | | | | | | | -.0877 | |
| .865 | -.2171 | | | | | | | | |
| .879 | | -.3027 | | | | | | | |
| .900 | -.2338 | | | -.2636 | | | -.0548 | | |
| .905 | | | -.3432 | | | | | | |
| .919 | | -.3187 | | | | | | | |
| .950 | | | | -.3412 | -.2277 | -.1745 | | | |
| .953 | | | -.3989 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .985 | -.3090 | | | | | | | | |
| 1.000 | | | -.2830 | | -.2141 | | -.2705 | | |

ARC97-019 IAB1 EVAP(ALLHL SEALED) LEFT WING BOT. (RETL39)

ALPHAO( 3) = .001 BETAO ( 4) = 3.898

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1220 | -.1311 | .2432 | .5773 | .6530 | .6048 | .6071 | .0083 | |
| .010 | -.0925 | -.1019 | .2337 | .1032 | .0860 | .0533 | .0883 | | |
| .020 | -.0815 | -.0763 | .2137 | .0969 | .1203 | .0236 | -.0979 | .0187 | |
| .040 | | -.0657 | .1729 | | | | | | |
| .050 | -.0870 | | | .0852 | .0892 | .0628 | -.0225 | | |
| .069 | | | | | | | | .0090 | |
| .080 | | | | .1723 | | | | | |
| .081 | | | .1454 | | | | | | |
| .086 | | -.0125 | | | | | | | |
| .094 | -.0773 | | | | | | | | |
| .150 | | | | .2983 | .1928 | .1308 | .0741 | | |
| .157 | | | | | | | | .0109 | |
| .163 | | .1279 | | | | | | | |
| .177 | | | .1441 | | | | | | |
| .229 | -.0229 | | | | | | | | |
| .246 | | .1410 | | | | | | | |
| .250 | | | | .2033 | .1343 | .1089 | .0764 | | |
| .274 | | | .3064 | | | | | | |
| .345 | | | | | | | | .0975 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .2822 | | | | | | | |
| .400 | | | | .2421 | .2239 | | .1198 | | |
| .402 | | | .2406 | | | | | | |
| .418 | | | | | | | | | -.0771 |
| .497 | .1835 | | | | | | | | |
| .503 | | | | | | | | .1933 | |
| .550 | | | | .2348 | .3108 | | | | |
| .565 | | | .2134 | | | | | | |
| .600 | | | | | | | .2312 | | |
| .637 | | .1999 | | | | | | | |
| .650 | | | | | | .2152 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1288 | | | | |
| .725 | | | | .0378 | | | | | |
| .730 | | | | | | | | | -.3570 |
| .750 | | | | | | .0489 | .0870 | | |
| .760 | | | -.1087 | | | | | | |
| .775 | | | | -.0891 | -.0334 | | | | |
| .798 | | -.1866 | | | | | | | |
| .808 | | | -.2252 | | | | | | |
| .834 | -.1903 | | | | | | | | |
| .839 | | -.1981 | | | | | | | |
| .850 | | | | -.2339 | -.1821 | -.0902 | | | |
| .857 | | | -.2774 | | | | | | |
| .882 | | | | | | | | -.1387 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL39)

ALPHAO( 3) = .001 BETAO ( 4) = 3.898

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.2033 | | | | | | | | |
| .879 | | -.2624 | | | | | | | |
| .900 | -.2269 | | | -.3188 | | | -.1185 | | |
| .905 | | | -.3328 | | | | | | |
| .919 | | -.2921 | | | | | | | |
| .950 | | | | -.3814 | -.2533 | -.2192 | | | |
| .953 | | | -.3731 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2782 | | | | | | | | |
| 1.000 | | | -.1833 | | -.2720 | | -.2716 | | |

ALPHAO( 3) = .014 BETAO ( 5) = 8.597

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1722 | -.0063 | .3158 | .5948 | .5867 | .5101 | .5488 | -.0113 | |
| .010 | -.1508 | .0001 | .3378 | .0799 | -.0157 | -.0604 | .0270 | | |
| .020 | -.1340 | .0388 | .3129 | .0710 | .0315 | -.0939 | -.1574 | .0029 | |
| .040 | | .0353 | .2215 | | | | | | |
| .050 | -.1091 | | | .0788 | .0149 | -.0325 | -.0770 | | |
| .069 | | | | | | | | .0017 | |
| .080 | | | | .1948 | | | | | |
| .081 | | | .1485 | | | | | | |
| .086 | | .0442 | | | | | | | |
| .094 | -.1248 | | | | | | | | |
| .150 | | | | .1426 | .1410 | .1053 | .0821 | | |
| .157 | | | | | | | | .0478 | |
| .163 | | .2007 | | | | | | | |
| .177 | | | .2196 | | | | | | |
| .229 | .0757 | | | | | | | | |
| .246 | | .1501 | | | | | | | |
| .250 | | | | .2183 | .1432 | .1197 | .1042 | | |
| .274 | | | .2373 | | | | | | |
| .345 | | | | | | | | .1817 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .2584 | | | | | | | |
| .400 | | | | .2214 | .2032 | | .1985 | | |
| .402 | | | .2585 | | | | | | |
| .418 | | | | | | | | | -.0814 |
| .497 | .2283 | | | | | | | | |
| .503 | | | | | | | | .1281 | |
| .550 | | | | .1901 | .2077 | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL39)

ALPHAO( 3) = .014 BETAO ( 5) = 6.597

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .2006 | | | | | | |
| .600 | | | | | | | .1911 | | |
| .637 | | .1963 | | | | | | | |
| .650 | | | | | | .1783 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1146 | | | | |
| .725 | | | | -.0096 | | | | | |
| .730 | | | | | | | | | -.4016 |
| .750 | | | | | | .0105 | .0237 | | |
| .760 | | | -.1390 | | | | | | |
| .775 | | | | -.1136 | -.0540 | | | | |
| .798 | | -.1835 | | | | | | | |
| .808 | | | -.2208 | | | | | | |
| .834 | -.1790 | | | | | | | | |
| .839 | | -.2014 | | | | | | | |
| .850 | | | | -.2539 | -.2016 | -.1255 | | | |
| .857 | | | -.2518 | | | | | | |
| .862 | | | | | | | | -.1894 | |
| .865 | -.1971 | | | | | | | | |
| .879 | | -.2588 | | | | | | | |
| .900 | -.2032 | | | -.3288 | | | -.1834 | | |
| .305 | | | -.3302 | | | | | | |
| .919 | | -.2745 | | | | | | | |
| .950 | | | | -.3809 | -.2589 | -.2478 | | | |
| .953 | | | -.3359 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .985 | -.2633 | | | | | | | | |
| 1.000 | | | -.1332 | | -.3000 | | -.2881 | | |

ALPHAO( 4) = 3.853 BETAO ( 1) = -3.877

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0138 | -.0147 | .3739 | .7528 | .7814 | .7484 | .7480 | .1724 | |
| .010 | .0343 | .0128 | .4130 | .2321 | .2259 | .2456 | .2951 | | |
| .020 | .0785 | .0051 | .3959 | .1733 | .2192 | .1621 | .1139 | .2099 | |
| .040 | | .0650 | .2312 | | | | | | |
| .050 | .0185 | | | .0574 | .0583 | .0814 | .1004 | | |
| .069 | | | | | | | | .2199 | |
| .080 | | | | .0292 | | | | | |

ARC97-019 TAB! LVAP(ALL HL SEALED) LEFT WING BOT. (RETL39)

ALPHAO( 4) = 3.553 BETAO ( 1) = -3.877

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | .0827 | | | | | | | | |
| .150 | | | | .1139 | .1057 | .1319 | .1788 | | |
| .157 | | | | | | | | .2820 | |
| .163 | | .2307 | | | | | | | |
| .177 | | | .1203 | | | | | | |
| .229 | .0262 | | | | | | | | |
| .246 | | .1549 | | | | | | | |
| .250 | | | | .0450 | .1842 | .1918 | .2248 | | |
| .274 | | | .0934 | | | | | | |
| .345 | | | | | | | | .3001 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1270 | | | | | | | |
| .400 | | | | .4798 | .5364 | | .4777 | | |
| .402 | | | .4449 | | | | | | |
| .418 | | | | | | | | | -.1699 |
| .497 | .1159 | | | | | | | | |
| .503 | | | | | | | | .2316 | |
| .550 | | | | .4997 | .4719 | | | | |
| .565 | | | .4999 | | | | | | |
| .600 | | | | | | | .3053 | | |
| .637 | | .4981 | | | | | | | |
| .650 | | | | | | .3314 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2583 | | | | |
| .725 | | | | .2198 | | | | | |
| .730 | | | | | | | | | -.4666 |
| .750 | | | | | | .1400 | .1348 | | |
| .760 | | | .1051 | | | | | | |
| .775 | | | | .0959 | .1010 | | | | |
| .798 | | .0004 | | | | | | | |
| .808 | | | -.0680 | | | | | | |
| .834 | -.1407 | | | | | | | | |
| .839 | | -.1887 | | | | | | | |
| .850 | | | | -.0944 | -.1182 | -.0002 | | | |
| .857 | | | -.1898 | | | | | | |
| .862 | | | | | | | | -.0815 | |
| .865 | -.1881 | | | | | | | | |
| .879 | | -.2784 | | | | | | | |
| .900 | -.2126 | | | -.2043 | | | -.0519 | | |
| .905 | | | -.2995 | | | | | | |
| .918 | | -.3350 | | | | | | | |
| .950 | | | | -.2922 | -.2288 | -.1485 | | | |
| .953 | | | -.3634 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2768 | | | | | | | | |

ARC87-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL39)

ALPHAO( 4) = 3.553 BETAO ( 1) = -3.877

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.2665 | | -.2123 | | -.3263 | | |

ALPHAO( 4) = 3.584 BETAO ( 2) = .361

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0812 | -.1232 | .2723 | .6785 | .6991 | .6839 | .6808 | .0828 | |
| .010 | -.0095 | -.0572 | .3408 | .2539 | .2285 | .2694 | .3864 | | |
| .020 | .0189 | .0061 | .3076 | .2059 | .2307 | .1967 | .2611 | .1439 | |
| .040 | | .0154 | .1544 | | | | | | |
| .050 | -.0509 | | | .1048 | .1164 | .2321 | .2652 | | |
| .069 | | | | | | | | .1474 | |
| .080 | | | | .1079 | | | | | |
| .081 | | | .0557 | | | | | | |
| .086 | | -.0048 | | | | | | | |
| .094 | .0631 | | | | | | | | |
| .150 | | | | .2157 | .3596 | .3048 | .2640 | | |
| .157 | | | | | | | | .1558 | |
| .163 | | .1113 | | | | | | | |
| .177 | | | .1018 | | | | | | |
| .229 | .0727 | | | | | | | | |
| .246 | | .1238 | | | | | | | |
| .250 | | | | .3196 | .2822 | .2669 | .2269 | | |
| .274 | | | .3386 | | | | | | |
| .345 | | | | | | | | .2663 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .3245 | | | | | | | |
| .400 | | | | .3130 | .3181 | | .2812 | | |
| .402 | | | .3389 | | | | | | |
| .418 | | | | | | | | | -.2965 |
| .497 | .2666 | | | | | | | | |
| .503 | | | | | | | | .2111 | |
| .550 | | | | .3465 | .4058 | | | | |
| .565 | | | .3332 | | | | | | |
| .600 | | | | | | | .2818 | | |
| .637 | | .3226 | | | | | | | |
| .650 | | | | | | .2884 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2119 | | | | |
| .725 | | | | .1392 | | | | | |
| .730 | | | | | | | | | -.5155 |
| .750 | | | | | | .1026 | .1067 | | |

ARC3F-019 TAB1 LVAP(ALCHL SEALED) LEFT WING BOT. (RETL39)

ALPHA0( 4) = 3.584 BETA0 ( 2) = .381

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2090 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | -.0027 | | | | | | |
| .775 | | | | .0208 | .0441 | | | | |
| .798 | | -.0981 | | | | | | | |
| .808 | | | -.1462 | | | | | | |
| .834 | -.2220 | | | | | | | | |
| .839 | | -.2431 | | | | | | | |
| .850 | | | | -.1641 | -.1666 | -.0399 | | | |
| .857 | | | -.2542 | | | | | | |
| .862 | | | | | | | | -.1319 | |
| .865 | -.2126 | | | | | | | | |
| .879 | | -.2954 | | | | | | | |
| .900 | -.2126 | | | -.2598 | | | -.0916 | | |
| .905 | | | -.3475 | | | | | | |
| .919 | | -.3028 | | | | | | | |
| .950 | | | | -.3383 | -.2625 | -.1835 | | | |
| .953 | | | -.3981 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2992 | | | | | | | | |
| 1.000 | | | -.2638 | | -.2027 | | -.3518 | | |

ALPHA0( 4) = 3.575 BETA0 ( 3) = 3.908

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1522 | -.2681 | .2467 | .7123 | .6848 | .6653 | .6226 | .0389 | |
| .010 | -.0852 | -.2278 | .3635 | .5402 | .4163 | .4140 | .4173 | | |
| .020 | -.0516 | -.1102 | .3926 | .4423 | .3747 | .3512 | .3009 | .1183 | |
| .040 | | -.0993 | .3405 | | | | | | |
| .050 | -.0798 | | | .3435 | .2675 | .2897 | .2820 | | |
| .069 | | | | | | | | .1377 | |
| .080 | | | | .2945 | | | | | |
| .081 | | | .2878 | | | | | | |
| .086 | | .0062 | | | | | | | |
| .094 | .0089 | | | | | | | | |
| .150 | | | | .2554 | .2871 | .2816 | .2755 | | |
| .157 | | | | | | | | .1545 | |
| .163 | | .2848 | | | | | | | |
| .177 | | | .3099 | | | | | | |
| .229 | -.0112 | | | | | | | | |
| .246 | | .2186 | | | | | | | |
| .250 | | | | .2901 | .2901 | .2720 | .2455 | | |
| .274 | | | .3048 | | | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL39)

ALPHA0( 4) = 3.575 BETA0 ( 3) = 3.908

SECTION ( 11LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .2258 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .3077 | | | | | | | |
| .400 | | | | .2989 | .3051 | | .2975 | | |
| .402 | | | .3111 | | | | | | |
| .418 | | | | | | | | | -.3536 |
| .497 | .2627 | | | | | | | | |
| .503 | | | | | | | | .1981 | |
| .550 | | | | .2772 | .3067 | | | | |
| .565 | | | .2509 | | | | | | |
| .600 | | | | | | | .2291 | | |
| .637 | | .2284 | | | | | | | |
| .650 | | | | | | .2106 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1202 | | | | |
| .725 | | | | .0317 | | | | | |
| .730 | | | | | | | | | -.5281 |
| .750 | | | | | | .0366 | .0847 | | |
| .760 | | | -.1042 | | | | | | |
| .775 | | | | -.0737 | -.0340 | | | | |
| .798 | | -.1786 | | | | | | | |
| .808 | | | -.2223 | | | | | | |
| .834 | -.1573 | | | | | | | | |
| .839 | | -.1907 | | | | | | | |
| .850 | | | | -.2255 | -.2050 | -.0870 | | | |
| .857 | | | -.2807 | | | | | | |
| .862 | | | | | | | | -.1506 | |
| .865 | -.1816 | | | | | | | | |
| .879 | | -.2415 | | | | | | | |
| .900 | -.1767 | | | -.3062 | | | -.1080 | | |
| .905 | | | -.3216 | | | | | | |
| .919 | | -.2526 | | | | | | | |
| .950 | | | | -.3709 | -.2793 | -.2116 | | | |
| .953 | | | -.3455 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2556 | | | | | | | | |
| 1.000 | | | -.1371 | | -.2481 | | -.3484 | | |

ARC97-019 (AB1 EVAP(ALLHL SEALED) LEFT WING BOT. (RETL39)

ALPHA0( 5) = 6.255 BETA0 ( 1) = .393

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0471 | -.1397 | .2573 | .7158 | .7159 | .6824 | .6548 | .0072 | |
| .010 | .0060 | -.0605 | .3605 | .5173 | .4730 | .5089 | .5478 | | |
| .020 | .0025 | .0008 | .3400 | .4429 | .4258 | .4383 | .4264 | .1378 | |
| .040 | | .0139 | .2121 | | | | | | |
| .050 | -.0431 | | | .3505 | .3018 | .3760 | .4026 | | |
| .069 | | | | | | | | .1777 | |
| .080 | | | | .3025 | | | | | |
| .081 | | | .2554 | | | | | | |
| .086 | | .0810 | | | | | | | |
| .094 | .0560 | | | | | | | | |
| .150 | | | | .2505 | .3208 | .3435 | .3567 | | |
| .157 | | | | | | | | .2164 | |
| .163 | | .1257 | | | | | | | |
| .177 | | | .2630 | | | | | | |
| .229 | .1045 | | | | | | | | |
| .246 | | .2399 | | | | | | | |
| .250 | | | | .3164 | .3208 | .3297 | .3196 | | |
| .274 | | | .2914 | | | | | | |
| 345 | | | | | | | | .2245 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .3147 | | | | | | | |
| .400 | | | | .3520 | .3703 | | .3758 | | |
| .402 | | | .3559 | | | | | | |
| .418 | | | | | | | | | -.4057 |
| .487 | .3043 | | | | | | | | |
| .503 | | | | | | | | .1735 | |
| .550 | | | | .3388 | .3640 | | | | |
| .565 | | | .3358 | | | | | | |
| .600 | | | | | | | .2535 | | |
| .637 | | .3299 | | | | | | | |
| 650 | | | | | | .2584 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1810 | | | | |
| .725 | | | | .1018 | | | | | |
| .730 | | | | | | | | | -.5357 |
| .750 | | | | | | .0750 | .0951 | | |
| .760 | | | -.0385 | | | | | | |
| .775 | | | | -.0087 | .0210 | | | | |
| .798 | | -.1302 | | | | | | | |
| .808 | | | -.1755 | | | | | | |
| .834 | -.1888 | | | | | | | | |
| .839 | | -.2434 | | | | | | | |
| .850 | | | | -.1782 | -.1784 | -.0547 | | | |
| .857 | | | -.2745 | | | | | | |
| .862 | | | | | | | | -.1349 | |

ARC97-019 (A81 CVAP(ALLHL SEALED) LEFT WING BOT. (RETL39)

ALPHA0( 5) = 6.255 BETA0 ( 1) = .393

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .885 | -.1972 | | | | | | | | |
| .879 | | -.2578 | | | | | | | |
| .900 | -.2114 | | | -.2660 | | | -.1011 | | |
| .905 | | | -.3521 | | | | | | |
| .919 | | -.2836 | | | | | | | |
| .950 | | | | -.3424 | -.2801 | -.1866 | | | |
| .953 | | | -.3726 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2972 | | | | | | | | |
| 1.000 | | | -.2273 | | -.2263 | | -.3773 | | |

ARC97-019 (A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL40) ... 12 OCT 92

REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.000 RN/FT = 2.500
ELV-IB = .000 ELV-OB = .000
RUDDER = .000 SPDBRK = .000

ALPHAO( 1) = -8.299 BETAO ( 1) = .072

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0186 | -.0037 | .2487 | .5570 | .5744 | .5250 | .5382 | -.1733 | |
| .010 | -.0240 | .0162 | .1175 | -.0194 | -.0556 | -.0338 | -.0213 | | |
| .020 | -.0065 | .0204 | .1312 | -.1076 | -.1092 | -.1562 | -.1585 | -.2324 | |
| .040 | | .0138 | .0407 | | | | | | |
| .050 | -.0398 | | | -.1391 | -.1540 | -.1881 | -.1950 | | |
| .069 | | | | | | | | -.2387 | |
| .080 | | | | -.1240 | | | | | |
| .081 | | | -.0501 | | | | | | |
| .086 | | -.0229 | | | | | | | |
| .094 | .0402 | | | | | | | | |
| .150 | | | | -.0657 | -.1751 | -.1565 | -.1934 | | |
| .157 | | | | | | | | -.2357 | |
| .163 | | .0367 | | | | | | | |
| .177 | | | -.0543 | | | | | | |
| .229 | .0060 | | | | | | | | |
| .246 | | -.0023 | | | | | | | |
| .250 | | | | -.0593 | -.1582 | -.1789 | -.1661 | | |
| .274 | | | -.0527 | | | | | | |
| .345 | | | | | | | | -.2488 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0843 | | | | | | | |
| .400 | | | | .0138 | -.0879 | | -.1783 | | |
| .402 | | | .0680 | | | | | | |
| .418 | | | | | | | | | -.2432 |
| .497 | -.0885 | | | | | | | | |
| .503 | | | | | | | | -.1799 | |
| .550 | | | | .0212 | -.0074 | | | | |
| .565 | | | .0168 | | | | | | |
| .600 | | | | | | | -.1780 | | |
| .637 | | .0420 | | | | | | | |
| .650 | | | | | | -.0920 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0380 | | | | |
| .725 | | | | .0942 | | | | | |
| .730 | | | | | | | | | -.2653 |
| .750 | | | | | | -.0542 | -.1855 | | |
| .760 | | | .0355 | | | | | | |
| .775 | | | | .0894 | .0316 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL40)

ALPHAO( 1) = -8.299 BETAO ( 1) = .072

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .798 | | -.0782 | | | | | | | |
| .808 | | | .0049 | | | | | | |
| .834 | -.1668 | | | | | | | | |
| .839 | | -.1487 | | | | | | | |
| .850 | | | | -.0164 | -.0248 | -.0499 | | | |
| .857 | | | -.0823 | | | | | | |
| .862 | | | | | | | | -.2063 | |
| .865 | -.1876 | | | | | | | | |
| .879 | | -.1168 | | | | | | | |
| .900 | -.1389 | | | -.0930 | | | -.1825 | | |
| .905 | | | -.1634 | | | | | | |
| .919 | | -.1074 | | | | | | | |
| .950 | | | | -.1517 | -.1150 | -.0752 | | | |
| .953 | | | -.1721 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1405 | | | | | | | | |
| 1.000 | | | -.1516 | | -.0969 | | -.1848 | | |

ALPHAO( 2) = -4.312 BETAO ( 1) = -4.221

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0117 | .0534 | .3431 | .7498 | .7066 | .6898 | .7028 | -.0648 | |
| .010 | -.0657 | .0831 | .2549 | .0991 | .0208 | .0623 | .1003 | | |
| .020 | -.0825 | .0864 | .2095 | -.0180 | -.0346 | -.0634 | -.0697 | -.1264 | |
| .040 | | .0758 | .0924 | | | | | | |
| .050 | -.0165 | | | -.0693 | -.0747 | -.1019 | -.1060 | | |
| .069 | | | | | | | | -.1377 | |
| .080 | | | | -.0891 | | | | | |
| .081 | | | -.0137 | | | | | | |
| .086 | | .0318 | | | | | | | |
| .094 | .1131 | | | | | | | | |
| .150 | | | | -.0907 | -.0985 | -.0895 | -.1070 | | |
| .157 | | | | | | | | -.1271 | |
| .163 | | .0730 | | | | | | | |
| .177 | | | .0023 | | | | | | |
| .229 | .0708 | | | | | | | | |
| .246 | | .0477 | | | | | | | |
| .250 | | | | -.0403 | -.0982 | -.0951 | -.0983 | | |
| .274 | | | .0157 | | | | | | |
| .345 | | | | | | | | -.1058 | |
| .382 | .0000 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL40)

ALPHAO( 2) = -4.312 BETAO ( 1) = -4.221

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .390 | | -.0398 | | | | | | | |
| .400 | | | | -.0403 | -.0878 | | -.1003 | | |
| .402 | | | -.0218 | | | | | | |
| .418 | | | | | | | | | -.1368 |
| .497 | -.0492 | | | | | | | | |
| .503 | | | | | | | | -.0940 | |
| .550 | | | | .0884 | -.0397 | | | | |
| .565 | | | .1107 | | | | | | |
| .600 | | | | | | | -.1082 | | |
| .637 | | .1457 | | | | | | | |
| .650 | | | | | | -.1096 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0038 | | | | |
| .725 | | | | .1508 | | | | | |
| .730 | | | | | | | | | -.1540 |
| .750 | | | | | | -.1152 | -.1430 | | |
| .760 | | | .1263 | | | | | | |
| .775 | | | | .1595 | .1073 | | | | |
| .798 | | -.0049 | | | | | | | |
| .808 | | | .1146 | | | | | | |
| .834 | -.0938 | | | | | | | | |
| .839 | | -.0013 | | | | | | | |
| .850 | | | | .0880 | .0672 | -.1202 | | | |
| .857 | | | .0036 | | | | | | |
| .862 | | | | | | | | -.1563 | |
| .865 | -.1327 | | | | | | | | |
| .879 | | -.0731 | | | | | | | |
| .900 | -.0796 | | | -.0219 | | | -.1881 | | |
| .905 | | | -.0952 | | | | | | |
| .919 | | -.0741 | | | | | | | |
| .950 | | | | -.0920 | -.0475 | -.0478 | | | |
| .953 | | | -.1445 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1018 | | | | | | | | |
| 1.000 | | | -.1174 | | -.1210 | | -.1771 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL40)

ALPHAO( 2) = -4.288 BETAO ( 2) = .038

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0361 | -.0112 | .2149 | .5592 | .5961 | .5430 | .5669 | -.1372 | |
| .010 | -.0546 | .0094 | .0901 | .0264 | -.0420 | -.0052 | .0215 | | |
| .020 | -.0361 | .0098 | .0950 | -.0662 | -.0886 | -.1190 | -.1236 | -.1869 | |
| .040 | | .0019 | .0315 | | | | | | |
| .050 | -.0645 | | | -.0995 | -.1275 | -.1491 | -.1586 | | |
| .069 | | | | | | | | -.1896 | |
| .080 | | | | -.1079 | | | | | |
| .081 | | | -.0516 | | | | | | |
| .086 | | -.0318 | | | | | | | |
| .094 | .0428 | | | | | | | | |
| .150 | | | | -.0759 | -.1467 | -.1302 | -.1593 | | |
| .157 | | | | | | | | -.1839 | |
| .163 | | .0212 | | | | | | | |
| .177 | | | -.0408 | | | | | | |
| .229 | .0025 | | | | | | | | |
| .246 | | -.0017 | | | | | | | |
| .250 | | | | -.0309 | -.1464 | -.1457 | -.1398 | | |
| .274 | | | -.0438 | | | | | | |
| .345 | | | | | | | | -.1504 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0714 | | | | | | | |
| .400 | | | | .0150 | -.0587 | | -.1511 | | |
| .402 | | | .0740 | | | | | | |
| .418 | | | | | | | | | -.2016 |
| .497 | -.0714 | | | | | | | | |
| .503 | | | | | | | | -.1484 | |
| .550 | | | | .0474 | .0008 | | | | |
| .565 | | | .0381 | | | | | | |
| .600 | | | | | | | -.1590 | | |
| .637 | | .0803 | | | | | | | |
| .650 | | | | | | -.0915 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0683 | | | | |
| .725 | | | | .1150 | | | | | |
| .730 | | | | | | | | | -.2208 |
| .750 | | | | | | -.0380 | -.1697 | | |
| .760 | | | .0819 | | | | | | |
| .775 | | | | .0838 | .0586 | | | | |
| .798 | | -.0531 | | | | | | | |
| .808 | | | .0155 | | | | | | |
| .834 | -.1560 | | | | | | | | |
| .839 | | -.1302 | | | | | | | |
| .850 | | | | -.0058 | -.0059 | -.0218 | | | |
| .857 | | | -.0817 | | | | | | |
| .862 | | | | | | | | -.1824 | |

ARC97-019 (A8) LVAP(ALLHL SEALED) LEFT WING BOT. (RETL40)

ALPHAO( 2) = -4.288 BETAO ( 2) = .038

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .885 | -.1725 | | | | | | | | |
| .879 | | -.1243 | | | | | | | |
| .900 | -.1282 | | | -.0860 | | | -.1823 | | |
| .905 | | | -.1849 | | | | | | |
| .919 | | -.1200 | | | | | | | |
| .950 | | | | -.1470 | -.1083 | -.0506 | | | |
| .953 | | | -.1907 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1402 | | | | | | | | |
| 1.000 | | | -.1652 | | -.1154 | | -.1909 | | |

ALPHAO( 2) = -4.260 BETAO ( 3) = 3.604

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0668 | -.0539 | .1919 | .4944 | .4008 | .3650 | .4109 | -.1964 | |
| .010 | -.0627 | -.0513 | .1304 | -.0432 | -.1275 | -.0747 | -.0464 | | |
| .020 | -.0733 | -.0559 | .1017 | -.1259 | -.1578 | -.1643 | -.1643 | -.2388 | |
| .040 | | -.0546 | .0407 | | | | | | |
| .050 | -.0439 | | | -.1343 | -.1796 | -.1899 | -.1937 | | |
| .069 | | | | | | | | -.2384 | |
| .080 | | | | -.1230 | | | | | |
| .081 | | | -.0321 | | | | | | |
| .086 | | .0031 | | | | | | | |
| .094 | -.0511 | | | | | | | | |
| .150 | | | | -.1224 | -.1588 | -.1538 | -.1980 | | |
| .157 | | | | | | | | -.2374 | |
| .163 | | .0624 | | | | | | | |
| .177 | | | -.0501 | | | | | | |
| .229 | -.0455 | | | | | | | | |
| .248 | | -.0437 | | | | | | | |
| .250 | | | | -.0972 | -.1252 | -.1722 | -.1705 | | |
| .274 | | | -.0423 | | | | | | |
| .345 | | | | | | | | -.1927 | |
| .362 | .0000 | | | | | | | | |
| .380 | | -.0555 | | | | | | | |
| .400 | | | | .0699 | .0208 | | -.1715 | | |
| .402 | | | .0945 | | | | | | |
| .418 | | | | | | | | | -.2431 |
| .497 | -.0389 | | | | | | | | |
| .503 | | | | | | | | -.1639 | |
| .550 | | | | .0628 | .0353 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL40)

ALPHA0( 2) = -4.260 BETA0 ( 3) = 3.604

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .588 | | | .0707 | | | | | | |
| .800 | | | | | | | -.1427 | | |
| .637 | | .0498 | | | | | | | |
| .650 | | | | | | -.0121 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0082 | | | | |
| .725 | | | | -.0057 | | | | | |
| .730 | | | | | | | | | -.2401 |
| .750 | | | | | | -.0468 | -.0484 | | |
| .760 | | | -.0997 | | | | | | |
| .775 | | | | -.0438 | .0069 | | | | |
| .798 | | -.1563 | | | | | | | |
| .808 | | | -.1634 | | | | | | |
| .834 | -.1853 | | | | | | | | |
| .839 | | -.1893 | | | | | | | |
| .850 | | | | -.0972 | -.0650 | -.0141 | | | |
| .857 | | | -.2022 | | | | | | |
| .862 | | | | | | | | -.1462 | |
| .865 | -.1737 | | | | | | | | |
| .879 | | -.1752 | | | | | | | |
| .900 | -.1678 | | | -.1656 | | | -.0778 | | |
| .905 | | | -.2009 | | | | | | |
| .919 | | -.1994 | | | | | | | |
| .950 | | | | -.2128 | -.1869 | -.0794 | | | |
| .953 | | | -.2104 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1439 | | | | | | | | |
| 1.000 | | | -.1523 | | -.1510 | | -.1427 | | |

ALPHA0( 3) = -.077 BETA0 ( 1) = -8.251

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0141 | .0903 | .4199 | .8747 | .8111 | .8092 | .8181 | .0734 | |
| .010 | -.0330 | .0698 | .2978 | .2081 | .1218 | .1687 | .2512 | | |
| .020 | -.0578 | .0409 | .2259 | .0748 | .0763 | .0802 | .0501 | .0300 | |
| .040 | | .1044 | .1887 | | | | | | |
| .050 | .0298 | | | .0172 | .0403 | .0153 | .0155 | | |
| .069 | | | | | | | | .0076 | |
| .080 | | | | .0011 | | | | | |
| .081 | | | .0748 | | | | | | |
| .086 | | .0802 | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL40)

ALPHAO( 3) = -.077 BETAO ( 1) = -6.251

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .8730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | .1075 | | | | | | | | |
| .150 | | | | -.0204 | .0025 | .0191 | .0148 | | |
| .157 | | | | | | | | .0023 | |
| .163 | | .1697 | | | | | | | |
| .177 | | | .0784 | | | | | | |
| .229 | .1039 | | | | | | | | |
| .246 | | .1418 | | | | | | | |
| .250 | | | | .0389 | -.0108 | .0099 | .0158 | | |
| .274 | | | .0105 | | | | | | |
| .345 | | | | | | | | .0158 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0384 | | | | | | | |
| .400 | | | | .0348 | .0176 | | .0119 | | |
| .402 | | | -.0182 | | | | | | |
| .418 | | | | | | | | | .0048 |
| .497 | .0024 | | | | | | | | |
| .503 | | | | | | | | .0366 | |
| .550 | | | | .1415 | .0421 | | | | |
| .565 | | | .1926 | | | | | | |
| .600 | | | | | | | -.0149 | | |
| .637 | | .1978 | | | | | | | |
| .650 | | | | | | -.0083 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0340 | | | | |
| .725 | | | | .2998 | | | | | |
| .730 | | | | | | | | | -.0479 |
| .750 | | | | | | -.0489 | -.0530 | | |
| .760 | | | .3366 | | | | | | |
| .775 | | | | .3015 | .2300 | | | | |
| .798 | | .2667 | | | | | | | |
| .808 | | | .2092 | | | | | | |
| .834 | -.0452 | | | | | | | | |
| 839 | | .1010 | | | | | | | |
| .850 | | | | .1662 | .1577 | -.0798 | | | |
| .857 | | | .0787 | | | | | | |
| .862 | | | | | | | | -.1031 | |
| .865 | -.0681 | | | | | | | | |
| .879 | | .0282 | | | | | | | |
| .900 | -.0294 | | | .3487 | | | -.1251 | | |
| .905 | | | -.0453 | | | | | | |
| .919 | | -.0536 | | | | | | | |
| .950 | | | | -.0391 | .0166 | .0105 | | | |
| .953 | | | -.1004 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0883 | | | | | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL40)

ALPHAO( 3) = -.077 BETAO ( 1) = -6.251

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1125 | | -.1994 | | -.1658 | | |

ALPHAO( 3) = -.075 BETAO ( 2) = -4.195

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0323 | .0499 | .3563 | .7946 | .7505 | .7383 | .7484 | .0459 | |
| .010 | -.0690 | .0440 | .2819 | .1688 | .0866 | .1274 | .2031 | | |
| .020 | -.0723 | .0708 | .2704 | .0441 | .0425 | .0231 | .0177 | .0054 | |
| .040 | | .0783 | .1263 | | | | | | |
| .050 | -.0181 | | | -.0133 | .0053 | -.0190 | -.0180 | | |
| .069 | | | | | | | | -.0168 | |
| .000 | | | | -.0294 | | | | | |
| .081 | | | .0252 | | | | | | |
| .086 | | .0434 | | | | | | | |
| .094 | .0671 | | | | | | | | |
| .150 | | | | -.0471 | -.0316 | -.0144 | -.0207 | | |
| .157 | | | | | | | | -.0191 | |
| .163 | | .0865 | | | | | | | |
| .177 | | | .0278 | | | | | | |
| .229 | .0569 | | | | | | | | |
| .245 | | .0777 | | | | | | | |
| .250 | | | | -.0004 | -.0328 | -.0197 | -.0151 | | |
| .274 | | | .0010 | | | | | | |
| .345 | | | | | | | | -.0038 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0130 | | | | | | | |
| .400 | | | | .0018 | -.0193 | | -.0125 | | |
| .402 | | | -.0424 | | | | | | |
| .418 | | | | | | | | | -.0182 |
| .497 | -.0409 | | | | | | | | |
| .503 | | | | | | | | -.0148 | |
| .550 | | | | .1344 | .0033 | | | | |
| .565 | | | .1554 | | | | | | |
| .600 | | | | | | | -.0337 | | |
| .637 | | .1808 | | | | | | | |
| .650 | | | | | | -.0412 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1190 | | | | |
| .725 | | | | .2530 | | | | | |
| .730 | | | | | | | | | -.0648 |
| .750 | | | | | | -.0680 | -.0781 | | |

ARC97-019 TAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL40)

ALPHAO( 3) = -.075 BETAO ( 2) = -4.195

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .2845 | | | | | | |
| .775 | | | | .2405 | .1888 | | | | |
| .798 | | .1844 | | | | | | | |
| .808 | | | .1671 | | | | | | |
| .834 | -.0748 | | | | | | | | |
| .839 | | .0575 | | | | | | | |
| .850 | | | | .1213 | .1144 | -.0498 | | | |
| .857 | | | .0432 | | | | | | |
| .862 | | | | | | | | -.1184 | |
| .865 | -.1168 | | | | | | | | |
| .879 | | -.0813 | | | | | | | |
| .900 | -.0465 | | | .0161 | | | -.1387 | | |
| .905 | | | -.0715 | | | | | | |
| .919 | | -.0881 | | | | | | | |
| .950 | | | | -.0639 | -.0129 | .0415 | | | |
| .953 | | | -.1373 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0811 | | | | | | | | |
| 1.000 | | | -.1369 | | .1755 | | -.1599 | | |

ALPHAO( 3) = -.072 BETAO ( 3) = .017

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0706 | -.0347 | .2257 | .8540 | .8358 | .8175 | .8355 | -.0283 | |
| .010 | -.0509 | -.0168 | .1581 | .1052 | .0378 | .0705 | .1295 | | |
| .020 | -.0453 | .0046 | .1238 | -.0029 | -.0047 | -.0272 | -.0306 | -.0578 | |
| .040 | | -.0001 | .1173 | | | | | | |
| .050 | -.0995 | | | -.0539 | -.0397 | -.0622 | -.0682 | | |
| .069 | | | | | | | | -.0753 | |
| .080 | | | | -.0729 | | | | | |
| .081 | | | -.0238 | | | | | | |
| .088 | | -.0295 | | | | | | | |
| .094 | -.0092 | | | | | | | | |
| .150 | | | | -.0894 | -.0771 | -.0578 | -.0872 | | |
| .157 | | | | | | | | -.0747 | |
| .163 | | .0421 | | | | | | | |
| .177 | | | -.0097 | | | | | | |
| .229 | -.0012 | | | | | | | | |
| .248 | | .0314 | | | | | | | |
| .250 | | | | -.0107 | -.0878 | -.0718 | -.0808 | | |
| .274 | | | -.0084 | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL40)

ALPHAO( 3) = -.072 BETAO ( 3) = .017

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | -.0581 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0173 | | | | | | | |
| .400 | | | | .0655 | -.0172 | | -.0677 | | |
| .402 | | | .1167 | | | | | | |
| .418 | | | | | | | | | -.0758 |
| .497 | .0107 | | | | | | | | |
| .503 | | | | | | | | -.0871 | |
| .550 | | | | .1103 | .0585 | | | | |
| .565 | | | .0758 | | | | | | |
| .600 | | | | | | | -.0839 | | |
| .637 | | .0902 | | | | | | | |
| .650 | | | | | | -.0302 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1641 | | | | |
| .725 | | | | .1997 | | | | | |
| .730 | | | | | | | | | -.1102 |
| .750 | | | | | | .0688 | -.1035 | | |
| .760 | | | .1438 | | | | | | |
| .775 | | | | .1581 | .1722 | | | | |
| .798 | | -.0068 | | | | | | | |
| .808 | | | .0575 | | | | | | |
| .834 | -.1383 | | | | | | | | |
| .839 | | -.0808 | | | | | | | |
| .850 | | | | .0619 | .0705 | .1074 | | | |
| .857 | | | -.0395 | | | | | | |
| .862 | | | | | | | | -.1390 | |
| .865 | -.1495 | | | | | | | | |
| .879 | | -.0992 | | | | | | | |
| .900 | -.1181 | | | -.0318 | | | -.1177 | | |
| .905 | | | -.1267 | | | | | | |
| .919 | | -.1224 | | | | | | | |
| .950 | | | | -.1047 | -.0599 | .0348 | | | |
| .953 | | | -.1685 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .985 | -.1258 | | | | | | | | |
| 1.000 | | | -.1632 | | -.1195 | | -.1875 | | |

ARC87-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL40)

ALPHA0( 31 = -.084 BETA0 ( 4) = 3.568

SECTION ( 11LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BM | .2980 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CM | | | | | | | | | |
| .000 | -.1088 | -.0708 | .1545 | .5218 | .4817 | .4808 | .5203 | -.0718 | |
| .010 | -.0982 | -.0683 | .1582 | .0585 | -.0278 | .0028 | .0683 | | |
| .020 | -.0982 | -.0678 | .1405 | -.0222 | -.0563 | -.0811 | -.0716 | -.0877 | |
| .040 | | -.0653 | .0741 | | | | | | |
| .050 | -.1173 | | | -.0388 | -.0804 | -.1077 | -.0980 | | |
| .069 | | | | | | | | -.0983 | |
| .080 | | | | -.0657 | | | | | |
| .081 | | | -.0171 | | | | | | |
| .086 | | -.0065 | | | | | | | |
| .094 | -.1190 | | | | | | | | |
| .150 | | | | -.0702 | -.0788 | -.0709 | -.0904 | | |
| .157 | | | | | | | | -.0871 | |
| .163 | | .0583 | | | | | | | |
| .177 | | | -.0420 | | | | | | |
| .229 | -.0417 | | | | | | | | |
| .248 | | -.0216 | | | | | | | |
| .250 | | | | -.0447 | -.0726 | -.0689 | -.0708 | | |
| .274 | | | .0051 | | | | | | |
| .345 | | | | | | | | -.0605 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0452 | | | | | | | |
| .400 | | | | .1885 | .1312 | | -.0383 | | |
| .402 | | | .1588 | | | | | | |
| .418 | | | | | | | | | -.0793 |
| .497 | -.0232 | | | | | | | | |
| .503 | | | | | | | | -.0575 | |
| .550 | | | | .1862 | .1837 | | | | |
| .585 | | | .1893 | | | | | | |
| .600 | | | | | | | .0283 | | |
| .637 | | .1483 | | | | | | | |
| .650 | | | | | | .1208 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2222 | | | | |
| .725 | | | | .1353 | | | | | |
| .730 | | | | | | | | | -.1243 |
| .750 | | | | | | .1885 | .0917 | | |
| .760 | | | -.0403 | | | | | | |
| .775 | | | | .0533 | .1049 | | | | |
| .798 | | -.1217 | | | | | | | |
| .808 | | | -.0848 | | | | | | |
| .834 | -.1731 | | | | | | | | |
| .839 | | -.1544 | | | | | | | |
| .850 | | | | -.0782 | -.0441 | .0917 | | | |
| .857 | | | -.1417 | | | | | | |
| .862 | | | | | | | | -.0388 | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL40)

ALPHAO( 3) = -.054 BETAO ( 4) = 3.568

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .885 | -.1721 | | | | | | | | |
| .879 | | -.1486 | | | | | | | |
| .900 | -.1520 | | | -.1481 | | | .0538 | | |
| .905 | | | -.1859 | | | | | | |
| .919 | | -.1875 | | | | | | | |
| .950 | | | | -.1984 | -.1589 | -.0342 | | | |
| .953 | | | -.2178 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1451 | | | | | | | | |
| 1.000 | | | -.1028 | | -.1485 | | -.1640 | | |

ALPHAO( 3) = -.044 BETAO ( 5) = 6.274

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1076 | -.1101 | .1029 | .4606 | .4521 | .4387 | .4528 | -.0234 | |
| .010 | -.1095 | -.1088 | .1366 | .0261 | -.0545 | -.0135 | .0372 | | |
| .020 | -.1214 | -.0886 | .1229 | -.0526 | -.0884 | -.0921 | -.0917 | -.0393 | |
| .040 | | -.0798 | .0415 | | | | | | |
| .050 | -.1492 | | | -.0739 | -.1128 | -.1151 | -.1161 | | |
| .069 | | | | | | | | -.0469 | |
| .080 | | | | -.0965 | | | | | |
| .081 | | | -.0512 | | | | | | |
| .086 | | -.0487 | | | | | | | |
| .094 | -.1068 | | | | | | | | |
| .150 | | | | -.0665 | -.1020 | -.0841 | -.0978 | | |
| .157 | | | | | | | | -.0389 | |
| .163 | | .0130 | | | | | | | |
| .177 | | | -.0401 | | | | | | |
| .229 | -.0738 | | | | | | | | |
| .248 | | -.0215 | | | | | | | |
| .250 | | | | .0500 | -.0203 | -.0738 | -.0495 | | |
| .274 | | | .0794 | | | | | | |
| .345 | | | | | | | | .0084 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1016 | | | | | | | |
| .400 | | | | .1697 | .2001 | | -.0177 | | |
| .402 | | | .1699 | | | | | | |
| .418 | | | | | | | | | -.0228 |
| .487 | .0188 | | | | | | | | |
| .503 | | | | | | | | .1213 | |
| .550 | | | | .1778 | .1813 | | | | |

ARC97-019 IA8: LVAP(ALLHL SEALED) LEFT WING BOT. (RETL40)

ALPHAO( 3) = -.044 BETAO ( 5) = 8.274

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .1552 | | | | | | |
| .600 | | | | | | | .2311 | | |
| .637 | | .1033 | | | | | | | |
| .650 | | | | | | .1424 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1781 | | | | |
| .725 | | | | .0287 | | | | | |
| .730 | | | | | | | | | -.0641 |
| .750 | | | | | | .1312 | .2285 | | |
| .760 | | | -.0780 | | | | | | |
| .775 | | | | -.0087 | .0508 | | | | |
| .798 | | -.1257 | | | | | | | |
| .808 | | | -.1231 | | | | | | |
| .834 | -.1326 | | | | | | | | |
| .839 | | -.1293 | | | | | | | |
| .850 | | | | -.1086 | -.0892 | .0339 | | | |
| .857 | | | -.1433 | | | | | | |
| .862 | | | | | | | | .0542 | |
| .865 | -.1388 | | | | | | | | |
| .879 | | -.1669 | | | | | | | |
| .900 | -.1498 | | | -.1852 | | | .0815 | | |
| .905 | | | -.1894 | | | | | | |
| .919 | | -.1914 | | | | | | | |
| .950 | | | | -.2040 | -.1733 | -.0726 | | | |
| .953 | | | -.2198 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1333 | | | | | | | | |
| 1.000 | | | -.1603 | | -.1623 | | -.1425 | | |

ALPHAO( 4) = 3.485 BETAO ( 1) = -4.189

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0451 | .0317 | .3903 | .8619 | .7985 | .7811 | .7976 | .1838 | |
| .010 | .0847 | .0457 | .3635 | .2454 | .1880 | .2809 | .3547 | | |
| .020 | .0534 | .0984 | .3162 | .1238 | .2027 | .1904 | .1716 | .1577 | |
| .040 | | .1075 | .1621 | | | | | | |
| .050 | .0898 | | | .0879 | .1202 | .1298 | .1418 | | |
| .068 | | | | | | | | .1335 | |
| .080 | | | | .0411 | | | | | |
| .081 | | | .0557 | | | | | | |
| .086 | | .0611 | | | | | | | |

AR097-019 !AB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL40)

ALPHA0( 41 = 3.465 BETA0 ( 1) = -4.189

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | .0088 | | | | | | | | |
| .150 | | | | .0123 | .0693 | .1022 | .1343 | | |
| .157 | | | | | | | | .1202 | |
| .163 | | .1218 | | | | | | | |
| .177 | | | .0574 | | | | | | |
| .229 | .0508 | | | | | | | | |
| .256 | | .0817 | | | | | | | |
| .250 | | | | .0508 | .0585 | .0909 | .1209 | | |
| .274 | | | -.0048 | | | | | | |
| .345 | | | | | | | | .1049 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0288 | | | | | | | |
| .400 | | | | .0566 | .0572 | | .1026 | | |
| .402 | | | -.0002 | | | | | | |
| .418 | | | | | | | | | .0272 |
| .497 | -.0120 | | | | | | | | |
| .503 | | | | | | | | .0771 | |
| .550 | | | | .2745 | .0663 | | | | |
| .565 | | | .2445 | | | | | | |
| .600 | | | | | | | .0618 | | |
| .637 | | .2790 | | | | | | | |
| .650 | | | | | | .0473 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3256 | | | | |
| .725 | | | | .3707 | | | | | |
| .730 | | | | | | | | | -.1383 |
| .750 | | | | | | .0498 | -.0068 | | |
| .760 | | | .3305 | | | | | | |
| .775 | | | | .3010 | .2952 | | | | |
| .798 | | .1790 | | | | | | | |
| .808 | | | .1708 | | | | | | |
| .834 | -.0262 | | | | | | | | |
| .839 | | .0245 | | | | | | | |
| .850 | | | | .1492 | .1437 | .2100 | | | |
| .857 | | | .0384 | | | | | | |
| .862 | | | | | | | | -.0798 | |
| .865 | -.0588 | | | | | | | | |
| .879 | | -.0808 | | | | | | | |
| .900 | -.1145 | | | .0340 | | | -.0383 | | |
| .905 | | | -.0798 | | | | | | |
| .919 | | -.1505 | | | | | | | |
| .950 | | | | -.0587 | .0144 | .1171 | | | |
| .953 | | | -.1452 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .985 | -.0918 | | | | | | | | |

AR097-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL40)

ALPHAO( 4) = 3.485 BETAO ( 1) = -4.189

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .76.. | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1642 | | -.2483 | | -.1847 | | |

ALPHAO( 4) = 3.478 BETAO ( 2) = .022

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0171 | -.0430 | .2871 | .6920 | .6960 | .6917 | .7052 | .1020 | |
| .010 | -.0117 | .0117 | .2789 | .1892 | .1427 | .2330 | .2980 | | |
| .020 | -.0242 | .0172 | .2370 | .0819 | .1626 | .1557 | .1311 | .1048 | |
| .040 | | .0107 | .1026 | | | | | | |
| .050 | .0184 | | | .0279 | .0773 | .0945 | .1043 | | |
| .069 | | | | | | | | .0871 | |
| .080 | | | | .0036 | | | | | |
| .081 | | | .007' | | | | | | |
| .086 | | -.0063 | | | | | | | |
| .094 | -.0576 | | | | | | | | |
| .150 | | | | .0308 | .0345 | .0660 | .0970 | | |
| .157 | | | | | | | | .0738 | |
| .163 | | .0805 | | | | | | | |
| .177 | | | .0308 | | | | | | |
| .229 | .0055 | | | | | | | | |
| .246 | | .0420 | | | | | | | |
| .250 | | | | .0712 | .0460 | .0590 | .0827 | | |
| .274 | | | .0205 | | | | | | |
| .345 | | | | | | | | .0629 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0446 | | | | | | | |
| .400 | | | | .1914 | .0745 | | .0832 | | |
| .402 | | | .2311 | | | | | | |
| .418 | | | | | | | | | -.0319 |
| .497 | .0472 | | | | | | | | |
| .503 | | | | | | | | .0410 | |
| .550 | | | | .2900 | .2722 | | | | |
| .565 | | | .2632 | | | | | | |
| .800 | | | | | | | .0595 | | |
| .837 | | .2518 | | | | | | | |
| .850 | | | | | | .2584 | | | |
| .870 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3718 | | | | |
| .725 | | | | .3091 | | | | | |
| .730 | | | | | | | | | -.1885 |
| .750 | | | | | | .3218 | .0872 | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL40)

ALPHAO( 4) = 3.478 BETAO ( 2) = .022

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .780 | | | .1775 | | | | | | |
| .775 | | | | .2205 | .2712 | | | | |
| .798 | | .0819 | | | | | | | |
| .808 | | | .0473 | | | | | | |
| .834 | -.1007 | | | | | | | | |
| .839 | | -.0613 | | | | | | | |
| .850 | | | | .0623 | .0887 | .2174 | | | |
| .857 | | | -.0512 | | | | | | |
| .862 | | | | | | | | -.0471 | |
| .865 | -.1195 | | | | | | | | |
| .879 | | -.1417 | | | | | | | |
| .900 | -.1404 | | | -.0338 | | | .2220 | | |
| .905 | | | -.1369 | | | | | | |
| .919 | | -.1907 | | | | | | | |
| .950 | | | | -.1115 | -.0448 | .0729 | | | |
| .953 | | | -.1886 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1242 | | | | | | | | |
| 1.000 | | | -.1939 | | -.1893 | | -.1643 | | |

ALPHAO( 4) = 3.487 BETAO ( 3) = 3.575

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1284 | -.0974 | .1882 | .5865 | .5964 | .6033 | .5988 | .0592 | |
| .010 | -.1001 | -.0719 | .2328 | .1654 | .1877 | .2334 | .2657 | | |
| .020 | -.0945 | -.0287 | .2142 | .1338 | .1926 | .1587 | .1300 | .0784 | |
| .040 | | -.0137 | .1269 | | | | | | |
| .050 | -.1288 | | | .0601 | .0754 | .0921 | .1006 | | |
| .069 | | | | | | | | .0672 | |
| .080 | | | | .0236 | | | | | |
| .091 | | | .0419 | | | | | | |
| .188 | | .0118 | | | | | | | |
| .194 | -.0838 | | | | | | | | |
| .150 | | | | 0320 | .0487 | .0789 | .1000 | | |
| .157 | | | | | | | | .0712 | |
| .163 | | .0789 | | | | | | | |
| .177 | | | .0331 | | | | | | |
| .229 | -.0076 | | | | | | | | |
| .246 | | .0471 | | | | | | | |
| .250 | | | | .1812 | .1104 | .1063 | .1010 | | |
| .274 | | | .1478 | | | | | | |

ARC67-019 IA81 LVAP(ALLM. SEALED) LEFT WING BOT. (RETL40)

ALPHAO( 4) = 3.467 BETAO ( 3) = 3.575

SECTION ( 1)LEFT W NO BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .0857 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1678 | | | | | | | |
| .400 | | | | .2850 | .2816 | | .1437 | | |
| .402 | | | .2849 | | | | | | |
| .418 | | | | | | | | | -.0978 |
| .497 | .1366 | | | | | | | | |
| .503 | | | | | | | | .1238 | |
| .550 | | | | .2354 | .2498 | | | | |
| .565 | | | .2258 | | | | | | |
| .600 | | | | | | | .2149 | | |
| .637 | | .2123 | | | | | | | |
| .650 | | | | | | .2307 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2929 | | | | |
| .725 | | | | .1654 | | | | | |
| .730 | | | | | | | | | -.2788 |
| .750 | | | | | | .2122 | .1947 | | |
| .760 | | | .0187 | | | | | | |
| .775 | | | | .0791 | .1406 | | | | |
| .798 | | -.0587 | | | | | | | |
| .808 | | | -.0745 | | | | | | |
| .834 | -.1497 | | | | | | | | |
| .839 | | -.1358 | | | | | | | |
| .850 | | | | -.0609 | -.0247 | .1148 | | | |
| .857 | | | -.1398 | | | | | | |
| .862 | | | | | | | | .0689 | |
| .865 | -.1520 | | | | | | | | |
| .879 | | -.1633 | | | | | | | |
| .900 | -.1362 | | | -.1333 | | | .0957 | | |
| .905 | | | -.1951 | | | | | | |
| .919 | | -.1865 | | | | | | | |
| .950 | | | | -.1859 | -.1391 | -.0122 | | | |
| .953 | | | -.2232 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .985 | -.1402 | | | | | | | | |
| 1.000 | | | -.2027 | | -.1459 | | -.1056 | | |

ARC97-019 (A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL40)

ALPHAO( 5) = 6.162 BETAO ( 1) = .040

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0487 | -.0396 | .2976 | .7195 | .7345 | .7457 | .7333 | .1401 | |
| .010 | -.0371 | .0132 | .3090 | .2429 | .2777 | .3531 | .3975 | | |
| .020 | -.0312 | .0214 | .2642 | .1444 | .2852 | .2641 | .2504 | .1693 | |
| .040 | | .0191 | .1320 | | | | | | |
| .050 | .0267 | | | .1054 | .1461 | .1760 | .2039 | | |
| .069 | | | | | | | | .1540 | |
| .080 | | | | .0989 | | | | | |
| .081 | | | .1124 | | | | | | |
| .088 | | .0381 | | | | | | | |
| .094 | -.0872 | | | | | | | | |
| .150 | | | | .1183 | .1337 | .1576 | .1933 | | |
| .157 | | | | | | | | .1425 | |
| .163 | | .0879 | | | | | | | |
| .177 | | | .0934 | | | | | | |
| .229 | .0046 | | | | | | | | |
| .246 | | .0738 | | | | | | | |
| .250 | | | | .0915 | .1366 | .1675 | .1739 | | |
| .274 | | | .0473 | | | | | | |
| .345 | | | | | | | | .1289 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1160 | | | | | | | |
| .400 | | | | .3545 | .2459 | | .1699 | | |
| .402 | | | .3463 | | | | | | |
| .418 | | | | | | | | | -.0775 |
| .497 | .1098 | | | | | | | | |
| .503 | | | | | | | | .1113 | |
| .550 | | | | .3632 | .3864 | | | | |
| .565 | | | .3492 | | | | | | |
| .600 | | | | | | | .2010 | | |
| .637 | | .3285 | | | | | | | |
| .650 | | | | | | .3869 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3560 | | | | |
| .725 | | | | .2768 | | | | | |
| .730 | | | | | | | | | -.2559 |
| .750 | | | | | | .2931 | .3152 | | |
| .760 | | | .1543 | | | | | | |
| .775 | | | | .1880 | .2330 | | | | |
| .798 | | .0545 | | | | | | | |
| .808 | | | .0231 | | | | | | |
| .834 | -.0854 | | | | | | | | |
| .839 | | -.0750 | | | | | | | |
| .850 | | | | .0402 | .0555 | .1920 | | | |
| .857 | | | -.0754 | | | | | | |
| .862 | | | | | | | | .1398 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL40)

ALPHAO( 5) = 6.182 BETAO ( 1) = .040

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CH | | | | | | | | | |
| .865 | -.1136 | | | | | | | | |
| .879 | | -.1558 | | | | | | | |
| .900 | -.1638 | | | -.0541 | | | .1673 | | |
| .905 | | | -.1532 | | | | | | |
| .919 | | -.2069 | | | | | | | |
| .950 | | | | -.1221 | -.0537 | .0489 | | | |
| .953 | | | -.1977 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1359 | | | | | | | | |
| 1.000 | | | -.2042 | | -.2296 | | -.1748 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL41) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 978.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.200 RN/FT = 2.500
ELV-IB = .000 ELV-OB = .000
RUDDER = .000 SPDBRK = .000

ALPHAO( 1) = -6.332 BETAO ( 1) = -.112

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0320 | .0551 | .2852 | .6488 | .6022 | .5599 | .5717 | -.1204 | |
| .010 | .0034 | .0447 | .1694 | .0442 | -.0027 | .0259 | .0397 | | |
| .020 | .0031 | .0544 | .1089 | -.0500 | -.0498 | -.0919 | -.0933 | -.1641 | |
| .040 | | .0565 | .0546 | | | | | | |
| .050 | -.0027 | | | -.0753 | -.0916 | -.1276 | -.1312 | | |
| .069 | | | | | | | | -.1659 | |
| .080 | | | | -.0726 | | | | | |
| .081 | | | -.0092 | | | | | | |
| .088 | | .0349 | | | | | | | |
| .094 | .0038 | | | | | | | | |
| .150 | | | | -.0876 | -.1151 | -.0937 | -.1353 | | |
| .157 | | | | | | | | -.1631 | |
| .163 | | .0723 | | | | | | | |
| .177 | | | -.0092 | | | | | | |
| .229 | .0563 | | | | | | | | |
| .246 | | .0388 | | | | | | | |
| .250 | | | | -.0423 | -.1229 | -.1189 | -.1085 | | |
| .274 | | | -.0081 | | | | | | |
| .345 | | | | | | | | -.1221 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0192 | | | | | | | |
| .400 | | | | .0556 | -.1013 | | -.1286 | | |
| .402 | | | .1118 | | | | | | |
| .418 | | | | | | | | | -.1842 |
| .497 | -.0194 | | | | | | | | |
| .503 | | | | | | | | -.1187 | |
| .550 | | | | .0208 | -.0101 | | | | |
| .565 | | | .0249 | | | | | | |
| .600 | | | | | | | -.1337 | | |
| .637 | | .0550 | | | | | | | |
| .650 | | | | | | -.0928 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0121 | | | | |
| .725 | | | | .0019 | | | | | |
| .730 | | | | | | | | | -.2043 |
| .750 | | | | | | -.0885 | -.1577 | | |
| .760 | | | -.0014 | | | | | | |
| .775 | | | | .0569 | .0413 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL41)

ALPHAO( 1) = -8.332 BETAO ( 1) = -.112

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .798 | | -.0388 | | | | | | | |
| .808 | | | -.0180 | | | | | | |
| .834 | -.1078 | | | | | | | | |
| .839 | | -.1056 | | | | | | | |
| .850 | | | | .0296 | .0036 | -.0804 | | | |
| .857 | | | -.0298 | | | | | | |
| .862 | | | | | | | | -.1387 | |
| .865 | -.1399 | | | | | | | | |
| .879 | | -.1521 | | | | | | | |
| .900 | -.1603 | | | -.0381 | | | -.1717 | | |
| .905 | | | -.1010 | | | | | | |
| .919 | | -.1288 | | | | | | | |
| .950 | | | | -.0923 | -.0746 | -.0773 | | | |
| .953 | | | -.1381 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0768 | | | | | | | | |
| 1.000 | | | -.1310 | | -.0829 | | -.14E- | | |

ALPHAO( 2) = -4.327 BETAO ( 1) = -4.351

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0352 | .1180 | .3773 | .8182 | .7757 | .7805 | .7759 | -.0144 | |
| .010 | -.0116 | .0927 | .2481 | .1822 | .0885 | .1304 | .1758 | | |
| .020 | -.0382 | .0873 | .1861 | .0451 | .0360 | .0019 | .0048 | -.0809 | |
| .040 | | .1153 | .1227 | | | | | | |
| .050 | -.0011 | | | -.0102 | -.0098 | -.0402 | -.0371 | | |
| .069 | | | | | | | | -.0711 | |
| .080 | | | | -.0268 | | | | | |
| .081 | | | .0566 | | | | | | |
| .086 | | .0941 | | | | | | | |
| .094 | -.0205 | | | | | | | | |
| .150 | | | | -.0404 | -.0397 | -.0272 | -.0483 | | |
| .157 | | | | | | | | -.0646 | |
| .183 | | .1480 | | | | | | | |
| .177 | | | .0260 | | | | | | |
| .229 | .1478 | | | | | | | | |
| .248 | | .0699 | | | | | | | |
| .250 | | | | .0038 | -.0488 | -.0408 | -.0380 | | |
| .274 | | | -.0276 | | | | | | |
| .345 | | | | | | | | -.0445 | |
| .382 | .0000 | | | | | | | | |

ARC97-019 IA81 LVAPIALLHL SEALED) LEFT WING BOT. (RETL41)

ALPHAO( 2) = -4.327 BETAO ( 1) = -4.351

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .390 | | .0204 | | | | | | | |
| .400 | | | | -.0065 | -.0321 | | -.0499 | | |
| .402 | | | -.0219 | | | | | | |
| .418 | | | | | | | | | -.0809 |
| .497 | .0119 | | | | | | | | |
| .503 | | | | | | | | -.0499 | |
| .550 | | | | .0701 | -.0348 | | | | |
| .565 | | | .1271 | | | | | | |
| .600 | | | | | | | -.0632 | | |
| .637 | | .1430 | | | | | | | |
| .650 | | | | | | -.0809 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0462 | | | | |
| .725 | | | | .0774 | | | | | |
| .730 | | | | | | | | | -.1054 |
| .750 | | | | | | -.1069 | -.0987 | | |
| .760 | | | .0917 | | | | | | |
| .775 | | | | .1449 | .0570 | | | | |
| .798 | | .0528 | | | | | | | |
| .808 | | | .1045 | | | | | | |
| .834 | -.0351 | | | | | | | | |
| .839 | | -.0388 | | | | | | | |
| .850 | | | | .1292 | .0633 | -.1297 | | | |
| .857 | | | 0947 | | | | | | |
| .862 | | | | | | | | -.1024 | |
| .865 | -.0740 | | | | | | | | |
| .879 | | -.0166 | | | | | | | |
| .900 | -.1080 | | | .0441 | | | -.1479 | | |
| .903 | | | -.0179 | | | | | | |
| .919 | | -.0095 | | | | | | | |
| .950 | | | | -.0266 | .0139 | -.1495 | | | |
| .953 | | | -.0661 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0516 | | | | | | | | |
| 1.000 | | | -.0958 | | -.0936 | | -.1598 | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL41)

ALPHAO( 2) = -4.302 BETAO ( 2) = -.140

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0083 | .0518 | .2898 | .8250 | .8135 | .5831 | .6060 | -.3820 | |
| .010 | -.0164 | .0471 | .1668 | .1000 | .0219 | .0518 | .0844 | | |
| .020 | -.0184 | .0484 | .1092 | .0048 | -.0244 | -.0596 | -.0576 | -.1168 | |
| .040 | | .0477 | .0631 | | | | | | |
| .050 | -.0102 | | | -.0340 | -.0654 | -.0933 | -.0944 | | |
| .069 | | | | | | | | -.1216 | |
| .080 | | | | -.0529 | | | | | |
| .081 | | | -.0117 | | | | | | |
| .086 | | .0332 | | | | | | | |
| .094 | -.0385 | | | | | | | | |
| .150 | | | | -.0860 | -.0899 | -.0681 | -.1029 | | |
| .157 | | | | | | | | -.1161 | |
| .163 | | .0602 | | | | | | | |
| .177 | | | -.0111 | | | | | | |
| .229 | .0511 | | | | | | | | |
| .246 | | .0343 | | | | | | | |
| .250 | | | | -.0393 | -.0973 | -.0906 | -.0840 | | |
| .274 | | | -.0457 | | | | | | |
| .345 | | | | | | | | -.0970 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0166 | | | | | | | |
| .400 | | | | .0513 | -.0963 | | -.1011 | | |
| .402 | | | .1106 | | | | | | |
| .418 | | | | | | | | | -.1353 |
| .497 | -.0065 | | | | | | | | |
| .503 | | | | | | | | -.0984 | |
| .550 | | | | .0478 | -.0029 | | | | |
| .565 | | | .0398 | | | | | | |
| .600 | | | | | | | -.1127 | | |
| .637 | | .0598 | | | | | | | |
| .650 | | | | | | -.0913 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0151 | | | | |
| .725 | | | | .0612 | | | | | |
| .730 | | | | | | | | | -.1582 |
| .750 | | | | | | -.0753 | -.1421 | | |
| .760 | | | .0361 | | | | | | |
| .775 | | | | .0878 | .0482 | | | | |
| .798 | | -.0166 | | | | | | | |
| .808 | | | .0179 | | | | | | |
| .834 | -.1073 | | | | | | | | |
| .839 | | -.0880 | | | | | | | |
| .850 | | | | .0404 | .0198 | -.0830 | | | |
| .857 | | | -.0212 | | | | | | |
| .862 | | | | | | | | -.1234 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL41)

ALPHAO( 2) = -4.302 BETAO ( 2) = -.140

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .885 | -.1343 | | | | | | | | |
| .879 | | -.1311 | | | | | | | |
| .900 | -.1488 | | | -.0295 | | | -.1829 | | |
| .905 | | | -.0959 | | | | | | |
| .919 | | -.1105 | | | | | | | |
| .950 | | | | -.0852 | -.0610 | -.0586 | | | |
| .953 | | | -.1374 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0790 | | | | | | | | |
| 1.000 | | | -.1367 | | -.1084 | | -.1499 | | |

ALPHAO( 2) = -4.281 BETAO ( 3) = 3.415

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | 7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0303 | -.0258 | .1849 | .5305 | .3921 | .4131 | .4778 | -.1461 | |
| .010 | -.0246 | -.0113 | .1568 | .0140 | -.0845 | .0048 | .0061 | | |
| .020 | -.0270 | -.0160 | .1217 | -.0740 | -.1174 | -.0939 | -.1114 | -.1755 | |
| .040 | | -.0211 | .0118 | | | | | | |
| .050 | -.0637 | | | -.1212 | -.1339 | -.1375 | -.1458 | | |
| .069 | | | | | | | | -.1768 | |
| .080 | | | | -.1129 | | | | | |
| .081 | | | -.0391 | | | | | | |
| .086 | | -.0184 | | | | | | | |
| .094 | -.0566 | | | | | | | | |
| .150 | | | | -.0850 | -.1369 | -.1107 | -.1509 | | |
| .157 | | | | | | | | -.1738 | |
| .163 | | .0089 | | | | | | | |
| .177 | | | -.0398 | | | | | | |
| .229 | -.0113 | | | | | | | | |
| .246 | | .0075 | | | | | | | |
| .250 | | | | -.0568 | -.1050 | -.1434 | -.1198 | | |
| .274 | | | -.0482 | | | | | | |
| .345 | | | | | | | | -.1427 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0282 | | | | | | | |
| .400 | | | | .0489 | -.0189 | | -.1485 | | |
| .402 | | | .0799 | | | | | | |
| .418 | | | | | | | | | -.1897 |
| .497 | .0003 | | | | | | | | |
| .503 | | | | | | | | -.1427 | |
| .550 | | | | .0273 | .0218 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL41)

ALPHAO( 2) = -4.281 BETAO ( 3) = 3.415

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .0543 | | | | | | |
| .600 | | | | | | | -.1301 | | |
| .637 | | .0384 | | | | | | | |
| .650 | | | | | | -.0181 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0155 | | | | |
| .725 | | | | .0356 | | | | | |
| .730 | | | | | | | | | -.2037 |
| .750 | | | | | | -.0258 | -.1058 | | |
| .760 | | | -.0573 | | | | | | |
| .775 | | | | -.0029 | -.0065 | | | | |
| .798 | | -.1190 | | | | | | | |
| .808 | | | -.1167 | | | | | | |
| .834 | -.1612 | | | | | | | | |
| .839 | | -.1762 | | | | | | | |
| .850 | | | | -.0472 | .0028 | -.0239 | | | |
| .857 | | | -.1629 | | | | | | |
| .862 | | | | | | | | -.1222 | |
| .865 | -.1850 | | | | | | | | |
| .879 | | -.1920 | | | | | | | |
| .900 | -.1584 | | | -.1043 | | | -.0887 | | |
| .905 | | | -.1952 | | | | | | |
| .919 | | -.1702 | | | | | | | |
| .950 | | | | -.1524 | -.1102 | -.0589 | | | |
| .953 | | | -.1895 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1068 | | | | | | | | |
| 1.000 | | | -.1480 | | -.1209 | | -.1304 | | |

ALPHAO( 3) = -.145 BETAO ( 1) = -8.442

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIAL CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0320 | .1205 | .4487 | .9845 | .8761 | .8640 | .8862 | .1173 | |
| .010 | .0048 | .1097 | .3248 | .2477 | .1819 | .2311 | .3144 | | |
| .020 | -.0245 | .0831 | .2848 | .1114 | .1394 | .1233 | .1112 | .0782 | |
| .040 | | .0740 | .0944 | | | | | | |
| .050 | -.0344 | | | .0543 | .0985 | .0781 | .0712 | | |
| .069 | | | | | | | | .0540 | |
| .080 | | | | .0248 | | | | | |
| .081 | | | .1112 | | | | | | |
| .086 | | .1389 | | | | | | | |

APC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL41)

ALPHA0( 3) = -.145 BETA0 ( 1) = -6.442

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2000 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0157 | | | | | | | | |
| .150 | | | | .0245 | .0439 | .0664 | .0641 | | |
| .157 | | | | | | | | .0472 | |
| .163 | | .1460 | | | | | | | |
| .177 | | | .0104 | | | | | | |
| .229 | .1324 | | | | | | | | |
| .246 | | .0237 | | | | | | | |
| .250 | | | | .0145 | .0252 | .0491 | .0598 | | |
| .274 | | | .0383 | | | | | | |
| .345 | | | | | | | | .0537 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0871 | | | | | | | |
| .400 | | | | .0218 | .0178 | | .0448 | | |
| .402 | | | .0171 | | | | | | |
| .418 | | | | | | | | | .0439 |
| .497 | .0526 | | | | | | | | |
| .503 | | | | | | | | .0397 | |
| .550 | | | | .0656 | .0325 | | | | |
| .565 | | | .1982 | | | | | | |
| .600 | | | | | | | .0128 | | |
| .637 | | .1958 | | | | | | | |
| .650 | | | | | | .0010 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0112 | | | | |
| .725 | | | | .1465 | | | | | |
| .730 | | | | | | | | | -.0118 |
| .750 | | | | | | -.0394 | -.0369 | | |
| .760 | | | .1303 | | | | | | |
| .775 | | | | .2470 | .1110 | | | | |
| .798 | | .0972 | | | | | | | |
| .808 | | | .2648 | | | | | | |
| .834 | -.0129 | | | | | | | | |
| .839 | | .1535 | | | | | | | |
| .850 | | | | .2301 | .1330 | -.0720 | | | |
| .857 | | | .1562 | | | | | | |
| .862 | | | | | | | | -.0827 | |
| .865 | -.0529 | | | | | | | | |
| .879 | | .0784 | | | | | | | |
| .900 | .0283 | | | .1300 | | | -.1012 | | |
| .905 | | | .0329 | | | | | | |
| .919 | | .0297 | | | | | | | |
| .950 | | | | .0372 | .0920 | -.1161 | | | |
| .953 | | | -.0330 | | | | | | |
| .955 | | .0000 | | | | | | | |

.985 -.0104



ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL41)

ALPHA0( 3) = -.145 BETA0 ( 1) = -6.442

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BM | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.0747 | | -.1358 | | -.1478 | | |

ALPHA0( 3) = -.137 BETA0 ( 2) = -4.372

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BM | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0060 | .0790 | .3978 | .8629 | .7961 | .7989 | .8083 | .0735 | |
| .010 | -.0212 | .0709 | .2878 | .2144 | .1354 | .1943 | .2622 | | |
| .020 | -.0454 | .0470 | .2218 | .0860 | .0960 | .0863 | .0755 | .0394 | |
| .040 | | .0393 | .0665 | | | | | | |
| .050 | -.0151 | | | .0240 | .0617 | .0380 | .0347 | | |
| .069 | | | | | | | | .0193 | |
| .080 | | | | .0034 | | | | | |
| .081 | | | .0827 | | | | | | |
| .086 | | .0971 | | | | | | | |
| .09? | -.0535 | | | | | | | | |
| .150 | | | | -.0006 | .0110 | .0320 | .0262 | | |
| .157 | | | | | | | | .0152 | |
| 163 | | .1604 | | | | | | | |
| .77 | | | -.0088 | | | | | | |
| .?9 | .0047 | | | | | | | | |
| .248 | | .0144 | | | | | | | |
| .250 | | | | .0041 | -.0088 | .0133 | .0271 | | |
| .274 | | | .0013 | | | | | | |
| .345 | | | | | | | | .0214 | |
| .362 | 0000 | | | | | | | | |
| .390 | | .0413 | | | | | | | |
| .400 | | | | -.0022 | -.0087 | | .0115 | | |
| .402 | | | -.0082 | | | | | | |
| .418 | | | | | | | | | .0086 |
| .497 | .0228 | | | | | | | | |
| .503 | | | | | | | | .0070 | |
| .550 | | | | .0060 | .0010 | | | | |
| .585 | | | .1814 | | | | | | |
| .600 | | | | | | | -.8144 | | |
| .837 | | .1529 | | | | | | | |
| .850 | | | | | | -.0217 | | | |
| .870 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0204 | | | | |
| .725 | | | | .1142 | | | | | |
| .730 | | | | | | | | | -.0414 |
| .750 | | | | | | -.0080 | -.0584 | | |

ARC97-019 TAB1 LVAP(ALUM SEALED) LEFT WING BOT. (RETL41)

ALPHA0( 3) = -.137 BETA0 ( 2) = -4.372

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .0887 | | | | | | |
| .775 | | | | .1872 | .0959 | | | | |
| .798 | | .0736 | | | | | | | |
| .808 | | | .2268 | | | | | | |
| .834 | -.0253 | | | | | | | | |
| .839 | | -.0155 | | | | | | | |
| .850 | | | | .1683 | .0933 | -.0993 | | | |
| .857 | | | .1210 | | | | | | |
| .862 | | | | | | | | -.0795 | |
| .865 | -.0681 | | | | | | | | |
| .879 | | .0232 | | | | | | | |
| .900 | -.0837 | | | .0822 | | | -.1194 | | |
| .905 | | | .0046 | | | | | | |
| .919 | | .0013 | | | | | | | |
| .950 | | | | .0049 | .0533 | -.1384 | | | |
| .953 | | | -.0586 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0280 | | | | | | | | |
| 1.000 | | | -.1030 | | -.1400 | | -.1589 | | |

ALPHA0( 3) = -.130 BETA0 ( 3) = -.176

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0401 | .0136 | .2820 | .7023 | .6491 | .6400 | .6495 | .0009 | |
| .010 | -.0520 | .0048 | .2097 | .1511 | .0873 | .1129 | .1624 | | |
| .020 | .0347 | .0058 | .1528 | .0448 | .0477 | .0137 | .0105 | -.0199 | |
| .040 | | .0415 | .0252 | | | | | | |
| .050 | -.0449 | | | -.0066 | .0007 | -.0279 | -.0283 | | |
| .069 | | | | | | | | -.0352 | |
| .080 | | | | -.0192 | | | | | |
| .081 | | | .0255 | | | | | | |
| .086 | | .0321 | | | | | | | |
| .094 | -.0561 | | | | | | | | |
| .150 | | | | -.0549 | -.0463 | -.0239 | -.0385 | | |
| .157 | | | | | | | | -.0417 | |
| .163 | | .0886 | | | | | | | |
| .177 | | | -.0553 | | | | | | |
| .229 | .0347 | | | | | | | | |
| .246 | | -.0037 | | | | | | | |
| .250 | | | | -.0508 | -.0594 | -.0448 | -.0304 | | |
| .274 | | | -.0478 | | | | | | |

ARC97-019 TAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL41)

ALPHAC( 3) = -.130 BETAO ( 3) = -.176

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | 2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | -.0362 | |
| .362 | .0050 | | | | | | | | |
| .390 | | .0010 | | | | | | | |
| .400 | | | | .0623 | -.0669 | | -.0434 | | |
| .402 | | | .1289 | | | | | | |
| .418 | | | | | | | | | -.0494 |
| .497 | .0211 | | | | | | | | |
| .503 | | | | | | | | -.0475 | |
| .550 | | | | .0738 | .0177 | | | | |
| .565 | | | .0797 | | | | | | |
| .600 | | | | | | | -.0352 | | |
| .637 | | .0874 | | | | | | | |
| .650 | | | | | | -.0803 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0413 | | | | |
| .725 | | | | .1011 | | | | | |
| .730 | | | | | | | | | -.0858 |
| .750 | | | | | | -.0742 | -.1037 | | |
| .760 | | | .0679 | | | | | | |
| .775 | | | | .1561 | .0996 | | | | |
| .798 | | -.0027 | | | | | | | |
| .808 | | | .0713 | | | | | | |
| .834 | -.0565 | | | | | | | | |
| .839 | | -.0672 | | | | | | | |
| .850 | | | | .1000 | .0803 | -.0293 | | | |
| .857 | | | .0050 | | | | | | |
| .862 | | | | | | | | -.1018 | |
| .865 | -.1237 | | | | | | | | |
| .879 | | -.0938 | | | | | | | |
| .900 | -.1370 | | | .0134 | | | -.1511 | | |
| .905 | | | -.0762 | | | | | | |
| .919 | | -.1045 | | | | | | | |
| .950 | | | | -.0560 | -.0119 | -.0059 | | | |
| .953 | | | -.1230 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0780 | | | | | | | | |
| 1.000 | | | -.1392 | | -.1228 | | -.1579 | | |

ARC87-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL41)

ALPHA)( 3; = -.117 BETAO ( 4) = 3.384

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0789 | -.0525 | .1542 | .5187 | .4851 | .4840 | .5229 | -.0626 | |
| .010 | -.0787 | -.0336 | .1357 | .0728 | .0028 | .0414 | .0900 | | |
| .020 | -.0688 | -.0353 | .1098 | -.0147 | -.0291 | -.0462 | -.0396 | -.0786 | |
| .040 | | -.0397 | .0132 | | | | | | |
| .050 | -.0972 | | | -.0680 | -.0623 | -.0812 | -.0757 | | |
| .069 | | | | | | | | -.0892 | |
| .080 | | | | -.0853 | | | | | |
| .081 | | | -.0407 | | | | | | |
| .086 | | -.0488 | | | | | | | |
| .094 | -.0899 | | | | | | | | |
| .150 | | | | -.0617 | -.0959 | -.0645 | -.0866 | | |
| .157 | | | | | | | | -.0895 | |
| .163 | | -.0084 | | | | | | | |
| .177 | | | -.0302 | | | | | | |
| .229 | -.0313 | | | | | | | | |
| .246 | | .0097 | | | | | | | |
| .250 | | | | -.0527 | -.0835 | -.0917 | -.0718 | | |
| .274 | | | -.0288 | | | | | | |
| .345 | | | | | | | | -.0813 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0202 | | | | | | | |
| .400 | | | | .0788 | .0025 | | -.0878 | | |
| .402 | | | .1061 | | | | | | |
| .418 | | | | | | | | | -.0971 |
| .497 | -.0146 | | | | | | | | |
| .503 | | | | | | | | -.0875 | |
| .550 | | | | .1081 | .0997 | | | | |
| .565 | | | .0926 | | | | | | |
| .600 | | | | | | | -.0687 | | |
| .637 | | .0665 | | | | | | | |
| .650 | | | | | | .0733 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1131 | | | | |
| .725 | | | | .0744 | | | | | |
| .730 | | | | | | | | | -.1213 |
| .750 | | | | | | .0774 | -.0284 | | |
| .760 | | | -.0202 | | | | | | |
| .775 | | | | .1011 | .1384 | | | | |
| .798 | | -.0905 | | | | | | | |
| .808 | | | -.0787 | | | | | | |
| .834 | -.1533 | | | | | | | | |
| .839 | | -.1490 | | | | | | | |
| .850 | | | | -.0143 | .0248 | .0733 | | | |
| .857 | | | -.0879 | | | | | | |
| .862 | | | | | | | | -.0838 | |

AR\97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL41)

ALPHAO( 3) = -.117 BETAO ( 4) = 3.384

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.1703 | | | | | | | | |
| .879 | | -.1493 | | | | | | | |
| .900 | -.1502 | | | -.0872 | | | -.0022 | | |
| .905 | | | -.1420 | | | | | | |
| .919 | | -.1503 | | | | | | | |
| .950 | | | | -.1392 | -.1058 | .0070 | | | |
| .953 | | | -.1693 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0993 | | | | | | | | |
| 1.000 | | | -.1693 | | -.1208 | | -.1421 | | |

ALPHAO( 3) = -.112 BETAO ( 5) = 6.096

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0862 | -.0897 | .0840 | .4275 | .4273 | .4239 | .4430 | -.0925 | |
| .010 | -.0832 | -.0856 | .0685 | .0375 | -.0223 | .0107 | .0396 | | |
| .020 | -.0896 | -.0816 | .0524 | -.0319 | -.0535 | -.0750 | -.0728 | -.1044 | |
| .040 | | -.0812 | .0187 | | | | | | |
| .050 | -.1175 | | | -.0486 | -.0800 | -.1027 | -.1058 | | |
| .069 | | | | | | | | -.1092 | |
| .080 | | | | -.0662 | | | | | |
| .081 | | | -.0305 | | | | | | |
| .085 | | -.0314 | | | | | | | |
| .094 | -.1032 | | | | | | | | |
| .150 | | | | -.0833 | -.0935 | -.0772 | -.1085 | | |
| .157 | | | | | | | | -.0945 | |
| .163 | | .0094 | | | | | | | |
| .177 | | | -.0638 | | | | | | |
| .229 | -.0811 | | | | | | | | |
| .248 | | -.0237 | | | | | | | |
| .250 | | | | -.0388 | -.0868 | -.0935 | -.0792 | | |
| .274 | | | -.0008 | | | | | | |
| .345 | | | | | | | | -.0730 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0339 | | | | | | | |
| .400 | | | | .1041 | .0724 | | -.0621 | | |
| .402 | | | .1241 | | | | | | |
| .418 | | | | | | | | | -.0919 |
| .497 | -.0250 | | | | | | | | |
| .503 | | | | | | | | -.0713 | |
| .550 | | | | .1375 | .1685 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL41)

ALPHAO( 3) = -.112 BETAO ( 5) = 6.096

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .1039 | | | | | | |
| .600 | | | | | | | .0314 | | |
| .637 | | .0652 | | | | | | | |
| .650 | | | | | | .1101 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1028 | | | | |
| .725 | | | | .0271 | | | | | |
| .730 | | | | | | | | | -.1089 |
| .750 | | | | | | .0866 | .0700 | | |
| .760 | | | -.0696 | | | | | | |
| .775 | | | | -.0149 | .0697 | | | | |
| .798 | | -.1165 | | | | | | | |
| .808 | | | -.1160 | | | | | | |
| .834 | -.1389 | | | | | | | | |
| .839 | | -.1263 | | | | | | | |
| .850 | | | | -.0790 | -.0393 | .0788 | | | |
| .857 | | | -.1335 | | | | | | |
| .862 | | | | | | | | -.0319 | |
| .865 | -.1284 | | | | | | | | |
| 979 | | -.1445 | | | | | | | |
| 900 | -.1274 | | | -.1294 | | | .0314 | | |
| .905 | | | -.1635 | | | | | | |
| .919 | | -.1670 | | | | | | | |
| .950 | | | | -.1647 | -.1457 | -.0329 | | | |
| .953 | | | -.1857 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0978 | | | | | | | | |
| 1.000 | | | -.1595 | | -.1397 | | -.1392 | | |

ALPHAO( 4) = 3.395 BETAO ( 1) = -4.359

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0289 | .0430 | .3938 | .8825 | .8399 | .8482 | .8295 | .1813 | |
| .010 | -.0281 | .0417 | .3209 | .2787 | .2185 | .3030 | .3718 | | |
| .020 | -.0265 | .0286 | .2843 | .1462 | .2108 | .2023 | .1845 | .1511 | |
| .040 | | .0262 | .1432 | | | | | | |
| .050 | .0950 | | | .0815 | .1411 | .1480 | .1597 | | |
| .069 | | | | | | | | .1259 | |
| .080 | | | | .0649 | | | | | |
| .081 | | | .0937 | | | | | | |
| .088 | | .0998 | | | | | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL41)

ALPHAO( 4) = 3.395 BETAO ( 1) = -4.359

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2980 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | .0681 | | | | | | | | |
| .150 | | | | .0373 | .0804 | .1104 | .1368 | | |
| .157 | | | | | | | | .1109 | |
| .163 | | .1514 | | | | | | | |
| .177 | | | .0445 | | | | | | |
| .229 | .0293 | | | | | | | | |
| .248 | | .0858 | | | | | | | |
| .250 | | | | .0842 | .0678 | .0937 | .1207 | | |
| .274 | | | .0190 | | | | | | |
| .345 | | | | | | | | .1013 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0484 | | | | | | | |
| .400 | | | | .0353 | .0710 | | .0985 | | |
| .402 | | | .0200 | | | | | | |
| .418 | | | | | | | | | .0458 |
| .497 | .0184 | | | | | | | | |
| .503 | | | | | | | | .0778 | |
| .550 | | | | .1748 | .0643 | | | | |
| .565 | | | .2044 | | | | | | |
| .600 | | | | | | | .0638 | | |
| .637 | | .2148 | | | | | | | |
| .650 | | | | | | .0818 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1483 | | | | |
| .725 | | | | .3153 | | | | | |
| .730 | | | | | | | | | -.0804 |
| .750 | | | | | | -.0147 | .0099 | | |
| .760 | | | .3572 | | | | | | |
| .775 | | | | .2804 | .2490 | | | | |
| .798 | | .2437 | | | | | | | |
| .808 | | | .2384 | | | | | | |
| .834 | .0093 | | | | | | | | |
| .839 | | .0780 | | | | | | | |
| .850 | | | | .1850 | .1948 | -.0428 | | | |
| .857 | | | .1122 | | | | | | |
| .862 | | | | | | | | -.0505 | |
| .835 | -.0251 | | | | | | | | |
| .879 | | -.0242 | | | | | | | |
| .900 | -.0670 | | | .0924 | | | -.0834 | | |
| .905 | | | -.0103 | | | | | | |
| .919 | | -.0941 | | | | | | | |
| .950 | | | | .0150 | .0770 | .0560 | | | |
| .953 | | | -.0758 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0350 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL41)

ALPHAO( 4) = 3.395 BETAO ( 1) = -4.359

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | 2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1244 | | -.1850 | | -.1548 | | |

ALPHAO( 4) = 3.403 BETAO ( 2) = -.170

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0710 | -.0187 | .2978 | .7417 | .6925 | .6986 | .6986 | .0922 | |
| .010 | -.0600 | -.0046 | .2688 | .2187 | .1573 | .2204 | .2924 | | |
| .020 | -.0536 | .0388 | .2288 | .1094 | .1496 | .1317 | .1273 | .0916 | |
| .040 | | .0584 | .1198 | | | | | | |
| .050 | .0016 | | | .0435 | .0835 | .0814 | .1001 | | |
| .069 | | | | | | | | .0715 | |
| .080 | | | | .0163 | | | | | |
| .08. | | | .0277 | | | | | | |
| .086 | | .0311 | | | | | | | |
| .094 | -.0168 | | | | | | | | |
| .150 | | | | -.0216 | .0272 | .0563 | .0781 | | |
| .157 | | | | | | | | .0616 | |
| .163 | | .1007 | | | | | | | |
| .177 | | | .0247 | | | | | | |
| .229 | .0374 | | | | | | | | |
| .246 | | .0435 | | | | | | | |
| .250 | | | | .0100 | .0128 | .0421 | .0701 | | |
| .274 | | | .0227 | | | | | | |
| .345 | | | | | | | | .0555 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0166 | | | | | | | |
| .400 | | | | .0359 | .0138 | | .0524 | | |
| .402 | | | .1195 | | | | | | |
| .418 | | | | | | | | | -.0107 |
| .497 | .0098 | | | | | | | | |
| .503 | | | | | | | | .0405 | |
| .550 | | | | .1808 | .0721 | | | | |
| .565 | | | .1713 | | | | | | |
| .600 | | | | | | | .0218 | | |
| .637 | | .1792 | | | | | | | |
| .650 | | | | | | .0108 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2320 | | | | |
| .725 | | | | .2832 | | | | | |
| .730 | | | | | | | | | -.1306 |
| .750 | | | | | | .0937 | -.0259 | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL41)

ALPHAO( 4) = 3.403 BETAO ( 2) = -.170

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .2254 | | | | | | |
| .775 | | | | .2443 | .2493 | | | | |
| .798 | | .1151 | | | | | | | |
| .808 | | | .1114 | | | | | | |
| .834 | -.0539 | | | | | | | | |
| .839 | | .0019 | | | | | | | |
| .850 | | | | .1291 | .1487 | .1514 | | | |
| .857 | | | .0136 | | | | | | |
| .862 | | | | | | | | -.0751 | |
| .865 | -.0754 | | | | | | | | |
| .879 | | -.0758 | | | | | | | |
| .900 | -.1128 | | | .0326 | | | -.0674 | | |
| .905 | | | -.0732 | | | | | | |
| .919 | | -.1272 | | | | | | | |
| .950 | | | | -.0425 | .0138 | .1097 | | | |
| .953 | | | -.1226 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0798 | | | | | | | | |
| 1.000 | | | -.1596 | | -.1628 | | -.1519 | | |

ALPHAO( 4) = 3.411 BETAO ( 3) = 3.387

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1148 | -.0672 | .1928 | .5775 | .5714 | .5717 | .5984 | .0484 | |
| .010 | -.1148 | -.0470 | .2024 | .1468 | .1005 | .1718 | .2354 | | |
| .020 | -.1073 | -.0332 | .1788 | .0609 | .0921 | .0931 | .0963 | .0542 | |
| .040 | | -.0311 | .0831 | | | | | | |
| .050 | -.0954 | | | .0082 | .0381 | .0475 | .0687 | | |
| .069 | | | | | | | | .0406 | |
| .080 | | | | .0056 | | | | | |
| .081 | | | .0288 | | | | | | |
| .088 | | -.0079 | | | | | | | |
| .094 | -.0644 | | | | | | | | |
| .150 | | | | -.0117 | .0089 | .0296 | .0531 | | |
| .157 | | | | | | | | .0314 | |
| .163 | | .0628 | | | | | | | |
| .177 | | | .0012 | | | | | | |
| .229 | -.0324 | | | | | | | | |
| .246 | | .0294 | | | | | | | |
| .250 | | | | .0029 | .0148 | .0289 | .0471 | | |
| .274 | | | .0228 | | | | | | |

ARC97-019 IA81 LVAP(ALLHL EALED) LEFT WING BOT. (RETL41)

ALPHAO( 4) = 3.411 BETAO ( 3) = 3.387

SECTION ( )LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BP | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .0293 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0687 | | | | | | | |
| .400 | | | | .1941 | .1368 | | .0389 | | |
| .402 | | | .1734 | | | | | | |
| .418 | | | | | | | | | -.0560 |
| .437 | .0273 | | | | | | | | |
| .503 | | | | | | | | .0137 | |
| .550 | | | | .2314 | .2395 | | | | |
| .565 | | | .2078 | | | | | | |
| .600 | | | | | | | .0512 | | |
| .637 | | .1804 | | | | | | | |
| .650 | | | | | | .1978 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2585 | | | | |
| .725 | | | | .2167 | | | | | |
| .730 | | | | | | | | | -.1705 |
| .750 | | | | | | .2262 | .1316 | | |
| .760 | | | .0548 | | | | | | |
| .775 | | | | .1418 | .2188 | | | | |
| .798 | | -.0449 | | | | | | | |
| .808 | | | -.0214 | | | | | | |
| .834 | -.1358 | | | | | | | | |
| .839 | | -.0869 | | | | | | | |
| .850 | | | | -.0005 | .0555 | .1585 | | | |
| .857 | | | -.0861 | | | | | | |
| .862 | | | | | | | | -.0295 | |
| .865 | -.1472 | | | | | | | | |
| .879 | | -.1182 | | | | | | | |
| .900 | -.1121 | | | -.0772 | | | .1166 | | |
| .905 | | | -.1410 | | | | | | |
| .919 | | -.1461 | | | | | | | |
| .950 | | | | -.1289 | -.0919 | .0456 | | | |
| .953 | | | -.1724 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0908 | | | | | | | | |
| 1.000 | | | -.1754 | | -.1342 | | -.1510 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL41)

ALPHAO( 5) = 8.079 BETAO ( 1) = -.145

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .3870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0820 | -.0152 | .3146 | .7626 | .7188 | .7290 | .7255 | .1258 | |
| .010 | -.0166 | .0218 | .3206 | .2751 | .2283 | .3160 | .3735 | | |
| .020 | .0171 | .0554 | .2809 | .1698 | .2554 | .2299 | .2183 | .1459 | |
| .040 | | .0574 | .1497 | | | | | | |
| .050 | .0304 | | | .1017 | .1428 | .1527 | .1793 | | |
| .069 | | | | | | | | .1309 | |
| .080 | | | | .0685 | | | | | |
| .081 | | | .0458 | | | | | | |
| .088 | | .0440 | | | | | | | |
| .094 | -.0323 | | | | | | | | |
| .150 | | | | .0300 | .0738 | .1127 | .1504 | | |
| .157 | | | | | | | | .1169 | |
| .163 | | .0938 | | | | | | | |
| .177 | | | .0512 | | | | | | |
| .229 | .0413 | | | | | | | | |
| .246 | | .0840 | | | | | | | |
| .250 | | | | .0507 | .0560 | .0984 | .1343 | | |
| .274 | | | .0791 | | | | | | |
| .345 | | | | | | | | .1002 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0389 | | | | | | | |
| .400 | | | | .1014 | .0589 | | .1111 | | |
| .402 | | | .1087 | | | | | | |
| .418 | | | | | | | | | -.0430 |
| .497 | .0238 | | | | | | | | |
| .503 | | | | | | | | .0784 | |
| .550 | | | | .3389 | .2439 | | | | |
| .565 | | | .2802 | | | | | | |
| .600 | | | | | | | .0710 | | |
| .637 | | .2675 | | | | | | | |
| .650 | | | | | | .2186 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3580 | | | | |
| .725 | | | | .3212 | | | | | |
| .730 | | | | | | | | | -.1933 |
| .750 | | | | | | .2784 | .0253 | | |
| .760 | | | .2348 | | | | | | |
| .775 | | | | .2382 | .2445 | | | | |
| .798 | | .1260 | | | | | | | |
| .808 | | | .0986 | | | | | | |
| .834 | -.0221 | | | | | | | | |
| .839 | | -.0054 | | | | | | | |
| .850 | | | | .0858 | .1188 | .2560 | | | |
| .857 | | | -.0103 | | | | | | |
| .862 | | | | | | | | -.0474 | |

ARC97-019 IA81 LVAP(ALUM SEALED) LEFT WING BOT. (RETL41)

ALPHA0( 5) = 6.079 BETA0 ( 1) = -.145

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .885 | -.0489 | | | | | | | | |
| .879 | | -.0874 | | | | | | | |
| .900 | -.1102 | | | -.0020 | | | .1411 | | |
| .905 | | | -.0984 | | | | | | |
| .919 | | -.1415 | | | | | | | |
| .950 | | | | -.0857 | .0103 | .1195 | | | |
| .953 | | | -.1452 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0859 | | | | | | | | |
| 1.000 | | | -.1724 | | -.2012 | | -.1351 | | |

AHC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL42) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 978.0000 IN X1
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.500 RN/FT = 2.300
ELV-IB = .000 ELV-OB = .000
RUDDER = .000 SPDBRK = .000

ALPHA0( I) = -8.275 BETA0 ( I) = .222

SECTION ( I)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .3990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0587 | -.0185 | .3008 | .7072 | .5930 | .6078 | .6237 | -.0714 | |
| .010 | .0770 | .0277 | .2086 | .1194 | .0460 | .0884 | .1070 | | |
| .020 | .0206 | .0794 | .1692 | .0126 | .0057 | -.0256 | -.0239 | -.0999 | |
| .040 | | .0833 | .1005 | | | | | | |
| .050 | .0414 | | | -.0435 | -.0270 | -.0648 | -.0833 | | |
| .069 | | | | | | | | -.0992 | |
| .080 | | | | -.0521 | | | | | |
| .081 | | | .0199 | | | | | | |
| .086 | | .0841 | | | | | | | |
| .094 | -.0054 | | | | | | | | |
| .150 | | | | -.0524 | -.0521 | -.0290 | -.0757 | | |
| .157 | | | | | | | | -.0977 | |
| .163 | | .1104 | | | | | | | |
| .177 | | | .0072 | | | | | | |
| .229 | .0654 | | | | | | | | |
| .246 | | .0652 | | | | | | | |
| .250 | | | | -.0388 | -.0685 | -.0655 | -.0458 | | |
| .274 | | | -.0358 | | | | | | |
| .345 | | | | | | | | -.0663 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0059 | | | | | | | |
| .400 | | | | .0769 | -.0732 | | -.0805 | | |
| .402 | | | .1175 | | | | | | |
| .418 | | | | | | | | | -.1220 |
| .497 | -.0165 | | | | | | | | |
| .503 | | | | | | | | -.0721 | |
| .550 | | | | .0258 | .0026 | | | | |
| .565 | | | .0524 | | | | | | |
| .600 | | | | | | | -.0853 | | |
| .637 | | .0944 | | | | | | | |
| .650 | | | | | | -.0520 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0128 | | | | |
| .725 | | | | -.0203 | | | | | |
| .730 | | | | | | | | | -.1403 |
| .750 | | | | | | -.0826 | -.1083 | | |
| .760 | | | .0248 | | | | | | |
| .775 | | | | -.0331 | -.0281 | | | | |

ARC97-019 1A81 LVAP(ALUHL SEALED) .EFT WING BOT. (RET/ 42)

ALPHAO( 1) = -8.275 BETAO ( 1) = .222

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .798 | | -.0108 | | | | | | | |
| .808 | | | -.0260 | | | | | | |
| .834 | -.0743 | | | | | | | | |
| .839 | | -.0805 | | | | | | | |
| .850 | | | | .0722 | -.0131 | -.0673 | | | |
| .857 | | | -.0712 | | | | | | |
| .862 | | | | | | | | -.0716 | |
| .865 | -.1021 | | | | | | | | |
| .879 | | -.1274 | | | | | | | |
| .900 | -.1280 | | | .0219 | | | -.1379 | | |
| .905 | | | -.0853 | | | | | | |
| .919 | | -.1505 | | | | | | | |
| .950 | | | | -.0352 | -.0431 | -.0622 | | | |
| .953 | | | -.1070 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0359 | | | | | | | | |
| 1.000 | | | -.0958 | | -.0746 | | -.1167 | | |

ALPHAO( 2) = -4.238 BETAO ( 1) = -3.999

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0631 | .0243 | .4129 | .8601 | .8090 | .8085 | .8010 | .018[illegible] | |
| .010 | .0367 | -.0099 | .2988 | .1992 | .1376 | .1912 | .2252 | | |
| .020 | .0127 | -.0034 | .2429 | .0764 | 0842 | .0603 | .0629 | -.0110 | |
| .040 | | .0049 | .0991 | | | | | | |
| .050 | .0233 | | | .0062 | .0369 | .0136 | .0182 | | |
| .069 | | | | | | | | -.0176 | |
| .080 | | | | -.0162 | | | | | |
| .081 | | | .1023 | | | | | | |
| .086 | | .1843 | | | | | | | |
| .094 | -.0022 | | | | | | | | |
| .150 | | | | .0041 | .0010 | .0193 | .0007 | | |
| .157 | | | | | | | | -.0114 | |
| .163 | | .1522 | | | | | | | |
| .177 | | | .0097 | | | | | | |
| .229 | .0085 | | | | | | | | |
| .248 | | .0502 | | | | | | | |
| 250 | | | | .0002 | -.0133 | -.0004 | .0127 | | |
| .274 | | | .0259 | | | | | | |
| .345 | | | | | | | | .0058 | |
| .362 | .0000 | | | | | | | | |

ARC87-019 TAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL42)

ALPHAO( 2) = -4.238 BETAO ( 1) = -3.999

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .390 | | -.0052 | | | | | | | |
| .400 | | | | -.0080 | -.0149 | | -.0377 | | |
| .402 | | | .0108 | | | | | | |
| .418 | | | | | | | | | -.0318 |
| .497 | .0590 | | | | | | | | |
| .503 | | | | | | | | -.0033 | |
| .550 | | | | .0871 | -.0046 | | | | |
| .565 | | | .1117 | | | | | | |
| .600 | | | | | | | -.0241 | | |
| .637 | | .1251 | | | | | | | |
| .650 | | | | | | -.0407 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0288 | | | | |
| .725 | | | | .0408 | | | | | |
| .730 | | | | | | | | | -.0606 |
| .750 | | | | | | -.0684 | -.0606 | | |
| .760 | | | .0576 | | | | | | |
| .775 | | | | .0255 | .0008 | | | | |
| .798 | | .0704 | | | | | | | |
| .808 | | | .0284 | | | | | | |
| .834 | .0238 | | | | | | | | |
| .839 | | .0078 | | | | | | | |
| .850 | | | | .0048 | -.0117 | -.0899 | | | |
| .857 | | | -.0047 | | | | | | |
| .862 | | | | | | | | -.0438 | |
| .865 | -.0168 | | | | | | | | |
| .879 | | -.0559 | | | | | | | |
| .900 | -.0732 | | | .0673 | | | -.1055 | | |
| .905 | | | .0313 | | | | | | |
| .919 | | -.0905 | | | | | | | |
| .950 | | | | .0225 | .0081 | -.1201 | | | |
| .953 | | | -.0094 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0268 | | | | | | | | |
| 1.000 | | | -.0635 | | -.0606 | | -.1295 | | |

ARC97-019 (A81 LVAP(ALLML SEALED) LEFT WING BOT. (REYL42)

ALPHA( 2) = -4.215 BETA( 2) = .197

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/B= | .1190 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0347 | -.0251 | .2962 | .6508 | .6148 | .6189 | .6373 | -.0376 | |
| .010 | .0189 | -.0403 | .2303 | .1111 | .0870 | .1105 | .1344 | | |
| .020 | .0087 | -.0060 | .1824 | .0210 | .0281 | -.0013 | .0018 | -.0580 | |
| .040 | | .0401 | .0955 | | | | | | |
| .050 | .0291 | | | -.0246 | -.0101 | -.0383 | -.0377 | | |
| .069 | | | | | | | | -.0613 | |
| .080 | | | | -.0314 | | | | | |
| .081 | | | .0173 | | | | | | |
| .096 | | .0919 | | | | | | | |
| .094 | -.0229 | | | | | | | | |
| .150 | | | | -.0417 | -.0395 | -.0159 | -.0501 | | |
| .157 | | | | | | | | -.0587 | |
| .183 | | .1070 | | | | | | | |
| .177 | | | .0021 | | | | | | |
| .239 | -.0367 | | | | | | | | |
| .246 | | .0586 | | | | | | | |
| .250 | | | | -.0392 | -.0560 | -.0454 | -.0259 | | |
| .274 | | | -.0379 | | | | | | |
| .345 | | | | | | | | -.0427 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0104 | | | | | | | |
| .400 | | | | .0683 | -.0640 | | -.0544 | | |
| .402 | | | .1117 | | | | | | |
| .418 | | | | | | | | | -.0778 |
| .497 | -.0204 | | | | | | | | |
| .500 | | | | | | | | -.0496 | |
| .550 | | | | .0395 | .0176 | | | | |
| .565 | | | .0551 | | | | | | |
| .600 | | | | | | | -.0660 | | |
| .637 | | .0999 | | | | | | | |
| .650 | | | | | | -.0683 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0013 | | | | |
| .725 | | | | -.0188 | | | | | |
| .730 | | | | | | | | | -.1011 |
| .750 | | | | | | -.0439 | -.0949 | | |
| .760 | | | .0238 | | | | | | |
| .775 | | | | -.0218 | .0019 | | | | |
| .798 | | -.0166 | | | | | | | |
| .808 | | | -.0251 | | | | | | |
| .834 | -.0784 | | | | | | | | |
| .832 | | -.0798 | | | | | | | |
| .850 | | | | .0810 | .0037 | -.0658 | | | |
| .857 | | | -.0613 | | | | | | |
| .862 | | | | | | | | -.0589 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL42)

ALPHAO( 2) = -4.215 BETAO ( 2) = .197

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .065 | -.1025 | | | | | | | | |
| .879 | | -.1222 | | | | | | | |
| .900 | - 1200 | | | .0286 | | | -.1329 | | |
| .905 | | | -.0682 | | | | | | |
| .919 | | -.1334 | | | | | | | |
| .950 | | | | -.0269 | -.0355 | -.0541 | | | |
| .953 | | | -.1017 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0320 | | | | | | | | |
| 1.000 | | | -.0977 | | -.0857 | | -.1325 | | |

ALPHAO( 2) = -4.201 BETAO ( 3) = 3.750

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0088 | -.0170 | .1807 | .5330 | .4738 | .4268 | .5176 | -.0931 | |
| .010 | -.0029 | -.0030 | .1642 | .0990 | -.0068 | .0551 | .0680 | | |
| .020 | .0007 | .0131 | .1427 | .0060 | -.0433 | -.0292 | -.0445 | -.1088 | |
| .040 | | .0182 | .0496 | | | | | | |
| .050 | -.0247 | | | -.0523 | -.0772 | -.0675 | -.0830 | | |
| .069 | | | | | | | | -.1108 | |
| .080 | | | | -.0732 | | | | | |
| .081 | | | -.0097 | | | | | | |
| .086 | | .0081 | | | | | | | |
| .094 | -.0185 | | | | | | | | |
| .150 | | | | -.0815 | -.0915 | -.0405 | -.0931 | | |
| .157 | | | | | | | | -.1073 | |
| .163 | | .0254 | | | | | | | |
| .177 | | | -.0489 | | | | | | |
| .229 | .0156 | | | | | | | | |
| .248 | | .0024 | | | | | | | |
| .250 | | | | -.0778 | -.0858 | -.0899 | -.0578 | | |
| .274 | | | -.0385 | | | | | | |
| .345 | | | | | | | | -.0902 | |
| .382 | .0000 | | | | | | | | |
| .390 | | .0002 | | | | | | | |
| .400 | | | | .0447 | .0035 | | -.1015 | | |
| .402 | | | .1008 | | | | | | |
| .418 | | | | | | | | | -.1229 |
| .497 | .0189 | | | | | | | | |
| .503 | | | | | | | | -.0935 | |
| .550 | | | | .0385 | .0082 | | | | |

ARC97-019 IABI LVAR(ALLHL SEALED) LEFT WING BOT. (RETL42)

ALPHAO( 2) = -4.201 BETAO ( 3) = 3.750

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .0890 | | | | | | |
| .600 | | | | | | | -.1080 | | |
| .637 | | .0818 | | | | | | | |
| .650 | | | | | | -.0338 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0203 | | | | |
| .725 | | | | .0213 | | | | | |
| .730 | | | | | | | | | -.1385 |
| .750 | | | | | | -.0445 | -.0953 | | |
| .760 | | | -.0176 | | | | | | |
| .775 | | | | .0048 | -.0014 | | | | |
| .798 | | -.0693 | | | | | | | |
| .808 | | | -.0769 | | | | | | |
| .834 | -.1111 | | | | | | | | |
| .839 | | -.1289 | | | | | | | |
| .850 | | | | -.0333 | -.0085 | -.0470 | | | |
| .857 | | | -.1186 | | | | | | |
| .862 | | | | | | | | -.0684 | |
| .865 | -.1376 | | | | | | | | |
| .879 | | -.1551 | | | | | | | |
| .900 | -.1401 | | | -.0758 | | | -.0855 | | |
| .905 | | | -.1477 | | | | | | |
| .919 | | -.1493 | | | | | | | |
| .950 | | | | -.1037 | -.0491 | -.0358 | | | |
| .953 | | | -.1564 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0440 | | | | | | | | |
| 1.000 | | | -.1272 | | -.0928 | | -.0946 | | |

ALPHAO( 3) = -.088 BETAO ( 1) = -6.077

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0830 | .1010 | .4777 | .9529 | .9081 | .9145 | .9191 | .1420 | |
| .010 | .0448 | .0856 | .3651 | .2795 | .2340 | .2810 | .3537 | | |
| .020 | .0189 | .1061 | .2965 | .1502 | .1857 | .1628 | .1600 | .1133 | |
| .040 | | .0920 | .1344 | | | | | | |
| .050 | -.0283 | | | .0764 | .1285 | .1079 | .1121 | | |
| .069 | | | | | | | | .0900 | |
| .080 | | | | .0409 | | | | | |
| .081 | | | .0601 | | | | | | |
| .088 | | .0910 | | | | | | | |

ARC97-019 !A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL42)

ALPHAO( 3) = -.088 BETAO ( 1) = -6.077

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0029 | | | | | | | | |
| .150 | | | | .0416 | .0717 | .1008 | .0943 | | |
| .157 | | | | | | | | .0802 | |
| .163 | | .1181 | | | | | | | |
| .177 | | | .0471 | | | | | | |
| .229 | .0591 | | | | | | | | |
| .246 | | .0655 | | | | | | | |
| .250 | | | | .0551 | .0577 | .0831 | .0933 | | |
| .274 | | | .0780 | | | | | | |
| .345 | | | | | | | | .0842 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0156 | | | | | | | |
| .400 | | | | .0473 | .0438 | | .0751 | | |
| .402 | | | .0385 | | | | | | |
| .418 | | | | | | | | | .0681 |
| .497 | .0721 | | | | | | | | |
| .503 | | | | | | | | .0696 | |
| .550 | | | | .0345 | .0293 | | | | |
| .565 | | | .1715 | | | | | | |
| .600 | | | | | | | .0460 | | |
| .637 | | .1855 | | | | | | | |
| .650 | | | | | | .0174 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0077 | | | | |
| .725 | | | | .0910 | | | | | |
| .730 | | | | | | | | | .0147 |
| .750 | | | | | | -.0384 | -.0024 | | |
| .760 | | | .0942 | | | | | | |
| .775 | | | | .0689 | .0062 | | | | |
| .798 | | .1078 | | | | | | | |
| .808 | | | .0558 | | | | | | |
| .834 | .0189 | | | | | | | | |
| .839 | | .0239 | | | | | | | |
| .850 | | | | .1217 | -.0265 | -.0617 | | | |
| .857 | | | .1143 | | | | | | |
| .862 | | | | | | | | -.0154 | |
| .865 | -.0098 | | | | | | | | |
| .879 | | -.0478 | | | | | | | |
| .900 | -.0605 | | | .1407 | | | -.0649 | | |
| .905 | | | .0984 | | | | | | |
| .919 | | .0883 | | | | | | | |
| .950 | | | | .0949 | .0411 | -.0818 | | | |
| .953 | | | .0270 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .985 | .0488 | | | | | | | | |

ARC97-019 IA81 LVAPIALLHL SEALED) LEFT WING BOT. (RETL42)

ALPHAO( 3) = -.088 BETAO ( 1) = -6.077

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.0495 | | -.0809 | | -.1191 | | |

ALPHAO( 3) = -.087 BETAO ( 2) = -4.025

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0234 | .0178 | .4292 | .8818 | .8280 | .8321 | .8455 | .1031 | |
| .010 | .0044 | -.0113 | .3339 | .2494 | .1993 | .2402 | .3056 | | |
| .020 | -.0156 | .0559 | .2714 | .1214 | .1524 | .1299 | .1255 | .0795 | |
| .040 | | .0663 | .1172 | | | | | | |
| .050 | -.0410 | | | .0400 | .0988 | .0808 | .0830 | | |
| .069 | | | | | | | | .0605 | |
| .080 | | | | .0063 | | | | | |
| .081 | | | .0310 | | | | | | |
| .086 | | .0699 | | | | | | | |
| .094 | -.0247 | | | | | | | | |
| .150 | | | | .0145 | .0391 | .0714 | .0631 | | |
| .157 | | | | | | | | .0511 | |
| .163 | | .0886 | | | | | | | |
| .177 | | | .0213 | | | | | | |
| .229 | -.0018 | | | | | | | | |
| .246 | | .0512 | | | | | | | |
| .250 | | | | .0219 | .0252 | .0493 | .0660 | | |
| .274 | | | .0310 | | | | | | |
| .345 | | | | | | | | .0529 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0219 | | | | | | | |
| .400 | | | | .0120 | .0110 | | .0467 | | |
| .402 | | | .0015 | | | | | | |
| .418 | | | | | | | | | .0352 |
| .497 | .0398 | | | | | | | | |
| .503 | | | | | | | | .0387 | |
| .550 | | | | .0550 | .0203 | | | | |
| .565 | | | .1327 | | | | | | |
| .600 | | | | | | | .0165 | | |
| .637 | | .1330 | | | | | | | |
| .550 | | | | | | -.0103 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0224 | | | | |
| .725 | | | | .0599 | | | | | |
| .730 | | | | | | | | | -.0110 |
| .750 | | | | | | -.0560 | -.0289 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL42)

ALPHAO( 3) = -.087 BETAO ( 2) = -4.025

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .780 | | | .0593 | | | | | | |
| .775 | | | | .0415 | .0053 | | | | |
| .798 | | .0821 | | | | | | | |
| .808 | | | .0245 | | | | | | |
| .834 | .0218 | | | | | | | | |
| .839 | | .0068 | | | | | | | |
| .850 | | | | .0858 | -.0295 | -.0687 | | | |
| .857 | | | .0130 | | | | | | |
| .862 | | | | | | | | -.0313 | |
| .865 | -.0145 | | | | | | | | |
| .879 | | -.0538 | | | | | | | |
| .900 | -.0802 | | | .0870 | | | -.0849 | | |
| .905 | | | .0590 | | | | | | |
| .919 | | -.0549 | | | | | | | |
| .950 | | | | .0438 | .0096 | -.1025 | | | |
| .953 | | | .0026 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | .0005 | | | | | | | | |
| 1.000 | | | -.0714 | | -.0897 | | -.1326 | | |

ALPHAO( 3) = -.082 BETAO ( 3) = .174

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0161 | -.0501 | .2749 | .7309 | .6556 | .6730 | .6755 | .0431 | |
| .010 | -.0160 | -.0645 | .2031 | .1748 | .1186 | .1642 | .2098 | | |
| .020 | -.0022 | -.0468 | .1604 | .0585 | .0643 | .0629 | .0655 | .0304 | |
| .040 | | -.0265 | .0464 | | | | | | |
| .050 | -.0153 | | | -.0050 | .0411 | .0164 | .0267 | | |
| .069 | | | | | | | | .0155 | |
| .080 | | | | -.0001 | | | | | |
| .081 | | | .0697 | | | | | | |
| .086 | | .0984 | | | | | | | |
| .094 | -.0648 | | | | | | | | |
| .150 | | | | -.0221 | -.0048 | .0252 | .0133 | | |
| .157 | | | | | | | | .0086 | |
| .183 | | .0804 | | | | | | | |
| .177 | | | -.0070 | | | | | | |
| .229 | -.0788 | | | | | | | | |
| .246 | | .0477 | | | | | | | |
| .250 | | | | -.0391 | -.0228 | -.0023 | .0221 | | |
| .274 | | | -.0245 | | | | | | |

AR697-019 1A81 (VAP(ALLHL SEALED) LEFT WING BOT. (RETL42)

ALPHAO( 3) = -.082 BETAO ( 3) = .174

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| /BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .0086 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0006 | | | | | | | |
| .400 | | | | .0045 | -.0348 | | -.0052 | | |
| .402 | | | .0880 | | | | | | |
| .418 | | | | | | | | | -.0049 |
| .497 | -.0029 | | | | | | | | |
| .503 | | | | | | | | -.0037 | |
| .550 | | | | .0677 | -.0110 | | | | |
| .565 | | | .0984 | | | | | | |
| .600 | | | | | | | -.0298 | | |
| .637 | | .1111 | | | | | | | |
| .650 | | | | | | -.0520 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0100 | | | | |
| .725 | | | | .0056 | | | | | |
| .730 | | | | | | | | | -.0434 |
| .750 | | | | | | -.0839 | -.0651 | | |
| .760 | | | .0206 | | | | | | |
| .775 | | | | -.0036 | -.0102 | | | | |
| .798 | | -.0185 | | | | | | | |
| .808 | | | -.0238 | | | | | | |
| .834 | -.0824 | | | | | | | | |
| .839 | | -.0762 | | | | | | | |
| .850 | | | | .0997 | .0125 | -.0773 | | | |
| .857 | | | -.0507 | | | | | | |
| .862 | | | | | | | | -.0466 | |
| .865 | -.1080 | | | | | | | | |
| .879 | | -.1153 | | | | | | | |
| .900 | -.1144 | | | .0543 | | | -.1105 | | |
| .905 | | | -.0514 | | | | | | |
| .919 | | -.0981 | | | | | | | |
| .950 | | | | -.0050 | -.0056 | -.0978 | | | |
| .953 | | | -.0822 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0229 | | | | | | | | |
| 1.000 | | | -.0980 | | -.0941 | | -.1521 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL42)

ALPHAO( 3) = -.071 BETAO ( 4) = 3.720

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .8730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0612 | -.0747 | .1583 | .4987 | .5068 | .5105 | .5543 | -.0208 | |
| .010 | -.0565 | -.0409 | .1418 | .1095 | .0641 | .0984 | .1418 | | |
| .020 | -.0449 | -.0143 | .1159 | .0239 | .0341 | .0159 | .0190 | -.0297 | |
| .040 | | -.0115 | .0304 | | | | | | |
| .050 | -.0526 | | | -.0301 | -.0081 | -.0204 | -.0191 | | |
| .069 | | | | | | | | -.0388 | |
| .080 | | | | -.0493 | | | | | |
| .081 | | | -.0239 | | | | | | |
| .086 | | -.0819 | | | | | | | |
| .094 | -.0587 | | | | | | | | |
| .150 | | | | -.0557 | -.0508 | -.0090 | -.0373 | | |
| .157 | | | | | | | | -.0417 | |
| .163 | | .0000 | | | | | | | |
| .177 | | | -.0529 | | | | | | |
| .229 | -.0738 | | | | | | | | |
| .246 | | -.0080 | | | | | | | |
| .250 | | | | -.0617 | -.0698 | -.0511 | -.0198 | | |
| .274 | | | -.0001 | | | | | | |
| .345 | | | | | | | | -.0417 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0211 | | | | | | | |
| .400 | | | | .0685 | -.0293 | | -.0551 | | |
| .402 | | | .1019 | | | | | | |
| .418 | | | | | | | | | -.0545 |
| .497 | .0370 | | | | | | | | |
| .503 | | | | | | | | -.0522 | |
| .550 | | | | .0850 | .0328 | | | | |
| .565 | | | .0897 | | | | | | |
| .600 | | | | | | | -.0769 | | |
| .637 | | .0781 | | | | | | | |
| .650 | | | | | | .0026 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0489 | | | | |
| .725 | | | | .0678 | | | | | |
| .730 | | | | | | | | | -.0825 |
| .750 | | | | | | .0108 | -.0958 | | |
| .760 | | | -.0022 | | | | | | |
| .775 | | | | .0473 | .0856 | | | | |
| .798 | | -.0810 | | | | | | | |
| .808 | | | -.0498 | | | | | | |
| .834 | -.1102 | | | | | | | | |
| .839 | | -.1177 | | | | | | | |
| .850 | | | | .0155 | .0842 | .0280 | | | |
| .857 | | | -.0877 | | | | | | |
| .862 | | | | | | | | -.0825 | |

AR097-019 (AB) (VARIABLE SEALED) LEFT WING BOT. (RE1542)

ALPHA( 3) = [illegible] BETA( [illegible]) = 3.720

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| [illegible]5 | -.1334 | | | | | | | | |
| [illegible]9 | | -.1321 | | | | | | | |
| [illegible]2 | -.1232 | | | -.0464 | | | -.0624 | | |
| [illegible]5 | | | -.1139 | | | | | | |
| [illegible]9 | | -.1202 | | | | | | | |
| [illegible]3 | | | | - [illegible]3 | -.0549 | .0066 | | | |
| [illegible]3 | | | -.1276 | | | | | | |
| [illegible]5 | | .0000 | | | | | | | |
| [illegible]5 | -.0409 | | | | | | | | |
| 1.000 | | | -.1240 | | -.1271 | | -.1159 | | |

ALPHA( 3) = -.067 BETA( 5) = 6.427

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0758 | -.0662 | .0915 | .3851 | .4117 | .4480 | .4748 | -.2481 | |
| .010 | -.0897 | -.0644 | .0916 | .0482 | .0421 | .0658 | .1002 | | |
| .020 | -.0676 | -.0544 | .0787 | -.0088 | .0139 | -.0144 | -.0091 | -.0545 | |
| .040 | | -.0544 | .0246 | | | | | | |
| .060 | -.0802 | | | -.0344 | -.0324 | -.0499 | -.0439 | | |
| .069 | | | | | | | | -.0612 | |
| .080 | | | | -.0489 | | | | | |
| .081 | | | -.0227 | | | | | | |
| .086 | | -.0196 | | | | | | | |
| .094 | -.1878 | | | | | | | | |
| .150 | | | | -.0475 | -.0610 | -.0261 | -.0616 | | |
| .157 | | | | | | | | -.0644 | |
| [illegible]9 | | .0058 | | | | | | | |
| [illegible] | | | .0023 | | | | | | |
| | -.0422 | | | | | | | | |
| | | .0152 | | | | | | | |
| | | | | -.0103 | -.0699 | -.0667 | -.0372 | | |
| | | | .0034 | | | | | | |
| [illegible] | | | | | | | | -.0641 | |
| [illegible] | .0000 | | | | | | | | |
| [illegible] | | .0059 | | | | | | | |
| [illegible] | | | | .0862 | .0257 | | -.0728 | | |
| [illegible] | | | .0826 | | | | | | |
| [illegible] | | | | | | | | | -.0753 |
| [illegible] | .0034 | | | | | | | | |
| [illegible] | | | | | | | | -.0724 | |
| .954 | | | | .1018 | .0836 | | | | |

DATE 08 OCT 75 !A01B - PRESSURE SOURCE DATA TABULATION

.R097-019 (A81 (VARIABLE SEALED) LEFT WING BOT

ALPHAO( 31 = - 087 BETAO ( 51 = 3.427

SECTION ( )LEFT WING BOTTOM DEPENDENT VARIABLE CP

| X/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .0808 | | | | | | |
| .600 | | | | | | | - .0619 | | |
| .637 | | .0693 | | | | | | | |
| .650 | | | | | | .0716 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0942 | | | | |
| .725 | | | | .0341 | | | | | |
| .730 | | | | | | | | | -.0999 |
| .750 | | | | | | .0506 | - .0038 | | |
| .760 | | | - .0536 | | | | | | |
| .785 | | | | - .0003 | .0289 | | | | |
| .794 | | - .0671 | | | | | | | |
| .800 | | | -.0715 | | | | | | |
| .834 | - .0962 | | | | | | | | |
| .839 | | - .0932 | | | | | | | |
| .850 | | | | -.0463 | -.0187 | .0466 | | | |
| .857 | | | -.0999 | | | | | | |
| .862 | | | | | | | | -.0415 | |
| .865 | -.1110 | | | | | | | | |
| .879 | | -.1178 | | | | | | | |
| .900 | -.1009 | | | -.0881 | | | -.0140 | | |
| .905 | | | -.1339 | | | | | | |
| .919 | | -.1290 | | | | | | | |
| .950 | | | | -.1127 | -.0950 | .0100 | | | |
| .953 | | | -.1518 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0350 | | | | | | | | |
| 1.000 | | | -.1292 | | -.1052 | | -.1091 | | |

ALPHAO( 41 = 3.400 BETAO ( ) = -4.002

SECTION ( )LEFT WING BOTTOM DEPENDENT VARIABLE CP

| X/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .500 | - .0210 | .0586 | .4015 | .8982 | .8771 | .8332 | .8641 | .1727 | |
| .510 | - .0086 | .0690 | .3458 | .3056 | .2622 | .3331 | .4097 | | |
| .525 | - .0249 | .0532 | .2911 | .1798 | .2345 | .2350 | .2221 | .1659 | |
| .540 | | .0443 | .1382 | | | | | | |
| .550 | - .0518 | | | .0714 | .1839 | .1717 | .1834 | | |
| .559 | | | | | | | | .1412 | |
| .580 | | | | .0639 | | | | | |
| .581 | | | .0723 | | | | | | |
| .596 | | .0690 | | | | | | | |

PRESSURE SOURCE DATA TABULATION

*2097-019 (ABI LVAR/ALLHR SEALED) LEFT WING BOT.

ALPHA [illegible] = 3 . BETA0 [illegible] = -4.092

[illegible] DILEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/C | .2997 | .3440 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/C | | | | | | | | | |
| [illegible] | -.0042 | | | | | | | | |
| 0 | | | | .0554 | .0930 | .1335 | .1497 | | |
| [illegible] | | | | | | | | .1220 | |
| [illegible] | | .0876 | | | | | | | |
| [illegible] | | | .0304 | | | | | | |
| [illegible] | -.035 | | | | | | | | |
| [illegible] | | .0498 | | | | | | | |
| [illegible] | | | | .0547 | .0741 | .1078 | .1365 | | |
| [illegible] | | | .0515 | | | | | | |
| [illegible] | | | | | | | | .1094 | |
| [illegible] | .0000 | | | | | | | | |
| [illegible] | | -.0039 | | | | | | | |
| [illegible] | | | | .0441 | .0665 | | .1068 | | |
| [illegible] | | | .0225 | | | | | | |
| [illegible] | | | | | | | | | .0579 |
| [illegible] | .0534 | | | | | | | | |
| [illegible] | | | | | | | | .0898 | |
| [illegible] | | | | .0560 | .0552 | | | | |
| [illegible] | | | .1654 | | | | | | |
| [illegible] | | | | | | | .0728 | | |
| [illegible] | | .1460 | | | | | | | |
| [illegible] | | | | | | .0503 | | | |
| [illegible] | | | | | | | | .0000 | |
| [illegible] | .0000 | | | | .0205 | | | | |
| [illegible] | | | | .1173 | | | | | |
| [illegible] | | | | | | | | | -.0485 |
| [illegible] | | | | | | -.0115 | .0221 | | |
| [illegible] | | | .1192 | | | | | | |
| [illegible] | | | | .1653 | .0545 | | | | |
| [illegible] | | .1049 | | | | | | | |
| [illegible] | | | .2126 | | | | | | |
| [illegible] | 0276 | | | | | | | | |
| [illegible] | | .1757 | | | | | | | |
| [illegible] | | | | .1757 | .0764 | -.0325 | | | |
| [illegible] | | | .1439 | | | | | | |
| | | | | | | | | -.0137 | |
| | .0005 | | | | | | | | |
| [illegible] | | .1042 | | | | | | | |
| [illegible] | .0030 | | | .1173 | | | -.0453 | | |
| [illegible] | | | .0458 | | | | | | |
| [illegible] | | .0319 | | | | | | | |
| | | | | .0583 | .0796 | -.0683 | | | |
| [illegible] | | | -.0359 | | | | | | |
| [illegible] | | .0000 | | | | | | | |
| [illegible] | .0053 | | | | | | | | |

ATE 26 OCT 76 ARIS - PRESSURE SOURCE DATA TABULATION PAGE 5

ARC07-0.9 TAMU CAP/ACCEL SEALED) LEFT WING BOT RE1642

ALPHAO( 1) = 3.400 BETAO ( 1) = -4.002

SECT 1 LEFT WING BOTTOM DEPENDENT VARIABLE CP

Y/BW .2990 .3640 .4270 .5340 .6730 .7800 .8870 .9720 1.0000

X/CW

.000 -.0910 -.1112 -.1192

ALPHAO( 2) = 3.413 BETAO ( 2) = .178

SECTION 1 (LEFT WING BOTTOM DEPENDENT VARIABLE CP

Y/BW .2990 .3640 .4270 .5340 .6730 .7800 .8870 .9720 1.0000

X/CW

.000 -.0508 .0026 .2866 .7574 .7079 .7333 .7293 .1122

.010 -.0435 .0188 .2540 .2448 .1818 .2600 .3259

.020 -.0319 .0299 .2153 .1361 .1586 .1662 .1537 .1107

.040 .0310 .1033

.050 -.0457 .0650 .1021 .1073 .1289

.059 .0922

.080 .0391

.081 .0617

.090 .0931

.094 -.0877

.150 .0015 .0450 .0775 .0956

.157 .0777

.163 .0435

.177 -.0115

.229 -.0098

.246 .0029

.250 .0043 .0293 .0535 .0879

.274 .0104

.345 .0690

.352 .0000

.390 -.0089

.400 -.0007 .0110 .0599

.402 .0055

.418 .0175

.497 .0348

.503 .0512

.550 .0158 .0149

.565 .0471

.600 .0308

.637 .0591

.650 .0017

.673 .0000

.700 .0000 .083

.745 .0972

.750 -.0458 -.0109

.780 -.0755

F4297-019 TAB EVAP(ALUM SEALED) LEFT WING BOT. (RET142)

ALPHA( ) = 3.413 BETA( ) = .178

SECTION ( ) LEFT ( ) BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| [illegible] | | | .1828 | | | | | | |
| .775 | | | | .2320 | .1573 | | | | |
| .798 | | .0708 | | | | | | | |
| [illegible] | | | .1457 | | | | | | |
| .834 | -.0562 | | | | | | | | |
| .839 | | .0169 | | | | | | | |
| [illegible] | | | | .1537 | .1176 | -.0382 | | | |
| .857 | | | .0438 | | | | | | |
| .862 | | | | | | | | -.0322 | |
| .865 | -.0801 | | | | | | | | |
| .879 | | -.0351 | | | | | | | |
| .900 | -.0873 | | | .0618 | | | -.0898 | | |
| .905 | | | -.0423 | | | | | | |
| .919 | | -.0917 | | | | | | | |
| .960 | | | | -.0090 | .0383 | .0325 | | | |
| .963 | | | -.0922 | | | | | | |
| .965 | | .0000 | | | | | | | |
| .965 | -.0161 | | | | | | | | |
| 1.000 | | | -.1335 | | -.1144 | | -.1359 | | |

ALPHA( ) = 3.420 BETA( ) = 3.721

SECTION ( ) LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1007 | -.0770 | .1812 | .5952 | .5905 | .6027 | .6102 | .0570 | |
| .010 | -.0962 | -.0450 | .1826 | .1757 | .1354 | .2030 | .2487 | | |
| .020 | -.0871 | -.0181 | .1579 | .0878 | .1172 | .1193 | .1074 | .0577 | |
| .040 | | -.0177 | .0780 | | | | | | |
| .060 | -.0769 | | | .0289 | .0593 | .0656 | .0744 | | |
| .078 | | | | | | | | .0454 | |
| .080 | | | | .0052 | | | | | |
| .100 | | | .0339 | | | | | | |
| | | -.0016 | | | | | | | |
| .114 | -.0969 | | | | | | | | |
| .120 | | | | -.0144 | .0111 | .0465 | .0508 | | |
| .138 | | | | | | | | .0345 | |
| .140 | | .0444 | | | | | | | |
| | | | .0167 | | | | | | |
| .160 | -.0359 | | | | | | | | |
| .180 | | .0548 | | | | | | | |
| .240 | | | | .0236 | .0011 | .0164 | .0512 | | |
| .274 | | | .0472 | | | | | | |

ARC97-01B (AB) CVAP/ALLHL SEALED) LEFT WING BOT.

[illegible] PHASE [illegible] = [illegible].420 DETAC[illegible] 3/ = 3.725

| SECTION | LEFT WING BOTTOM | | | | DEPENDENT VARIABLE CP | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Y/BM | .1980 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
| XSCM | | | | | | | | | |
| .548 | | | | | | | | .0305 | |
| .582 | .0000 | | | | | | | | |
| .590 | | .0559 | | | | | | | |
| .600 | | | | .1371 | .0362 | | .0229 | | |
| .602 | | | .1429 | | | | | | |
| .618 | | | | | | | | | -.0235 |
| .697 | .0360 | | | | | | | | |
| .703 | | | | | | | | .0167 | |
| .750 | | | | .1410 | .1239 | | | | |
| .765 | | | .1335 | | | | | | |
| .800 | | | | | | | .0055 | | |
| .811 | | .1049 | | | | | | | |
| .850 | | | | | | .0947 | | | |
| .900 | | | | | | | | .0000 | |
| .900 | .0000 | | | | .1995 | | | | |
| .925 | | | | .1076 | | | | | |
| .930 | | | | | | | | | -.1029 |
| .950 | | | | | | .1266 | -.0268 | | |
| .950 | | | .0357 | | | | | | |
| .975 | | | | .1115 | .1615 | | | | |
| .998 | | -.0233 | | | | | | | |
| 1.006 | | | -.0059 | | | | | | |
| 1.034 | -.0900 | | | | | | | | |
| 1.039 | | -.0716 | | | | | | | |
| 1.050 | | | | .0311 | .1168 | .1302 | | | |
| 1.057 | | | -.0442 | | | | | | |
| 1.082 | | | | | | | | -.0416 | |
| 1.085 | -.1013 | | | | | | | | |
| 1.079 | | -.0816 | | | | | | | |
| 1.100 | -.0929 | | | -.0335 | | | .0153 | | |
| 1.105 | | | .0858 | | | | | | |
| 1.119 | | -.1024 | | | | | | | |
| 1.150 | | | | -.0789 | -.0476 | .0838 | | | |
| 1.153 | | | -.1127 | | | | | | |
| 1.175 | | .0100 | | | | | | | |
| 1.205 | .0339 | | | | | | | | |
| [illegible] | | | [illegible]53 | | .1069 | | [illegible]1294 | | |

ARC97-0.3 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL421

ALPHA SI = 6.075 BETAO ( 1) = .198

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CR | | | | | | | | | |
| .000 | -.0689 | -.0129 | .3092 | .7767 | .7230 | .7445 | .7540 | .1421 | |
| .010 | -.0617 | .0094 | .3094 | .2913 | .2320 | .3291 | .4006 | | |
| .020 | -.0548 | .0180 | .2753 | .1849 | .2399 | .2403 | .2456 | .1567 | |
| .040 | | .0209 | .1505 | | | | | | |
| .050 | -.0638 | | | .1076 | .1481 | .1696 | .1992 | | |
| .069 | | | | | | | | .1407 | |
| .080 | | | | .1146 | | | | | |
| .081 | | | .0609 | | | | | | |
| .086 | | .0689 | | | | | | | |
| .094 | -.0431 | | | | | | | | |
| .150 | | | | .0303 | .0852 | .1253 | .1579 | | |
| .157 | | | | | | | | .1240 | |
| .163 | | .0897 | | | | | | | |
| .177 | | | .0229 | | | | | | |
| .229 | .0081 | | | | | | | | |
| .246 | | .0230 | | | | | | | |
| .250 | | | | .0360 | .0652 | .1007 | .1374 | | |
| .274 | | | .0064 | | | | | | |
| .345 | | | | | | | | .1054 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0481 | | | | | | | |
| .400 | | | | .0172 | .0432 | | .1094 | | |
| .402 | | | .1219 | | | | | | |
| .418 | | | | | | | | | -.0082 |
| .497 | .0633 | | | | | | | | |
| .503 | | | | | | | | .0847 | |
| .550 | | | | .1718 | .0457 | | | | |
| .565 | | | .1997 | | | | | | |
| .600 | | | | | | | .0724 | | |
| .637 | | .1935 | | | | | | | |
| .650 | | | | | | .0460 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2453 | | | | |
| .725 | | | | .3278 | | | | | |
| .730 | | | | | | | | | -.1328 |
| .750 | | | | | | .0971 | .0208 | | |
| .760 | | | .2294 | | | | | | |
| .775 | | | | .2867 | .2566 | | | | |
| .793 | | .0997 | | | | | | | |
| .809 | | | .1484 | | | | | | |
| .874 | -.0355 | | | | | | | | |
| .948 | | .0237 | | | | | | | |
| .950 | | | | .1502 | .1473 | .1253 | | | |
| [illegible] | | | .0382 | | | | | | |
| .992 | | | | | | | | -.0183 | |

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL42)

ALPHAO( 5) = 6.075 BETAO ( 1) = .198

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.0580 | | | | | | | | |
| .879 | | -.0454 | | | | | | | |
| .900 | -.0818 | | | .0499 | | | -.0447 | | |
| .905 | | | -.0470 | | | | | | |
| .919 | | -.0956 | | | | | | | |
| .950 | | | | -.0219 | .0170 | .1118 | | | |
| .953 | | | -.0962 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0204 | | | | | | | | |
| 1.000 | | | -.1410 | | -.1517 | | -.1141 | | |

[illegible] SOURCE DATA TABULATION

[illegible] (A91 EVAPARALLEL SEALED) LEFT WING BOT. [illegible]

REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.550 RN/FT = 2.500
ELV-IB = 8.000 ELV-OB = .000
RUDDR = .000 SPOBRK = .000

ALPHA(I) = -6.289 BETA(I) = .408

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2930 | .3640 | .4270 | .5340 | .6730 | .7900 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0051 | -.0251 | .2064 | .4883 | .4360 | .4061 | .4310 | -.3657 | |
| .010 | .0301 | -.0520 | -.0040 | -.2336 | -.3478 | -.2520 | -.2445 | | |
| .020 | .0311 | -.0933 | -.0593 | -.3425 | -.3867 | -.3976 | -.3974 | -.3624 | |
| .040 | | -.0727 | -.1691 | | | | | | |
| .050 | -.0504 | | | -.3331 | -.4089 | -.4332 | -.4302 | | |
| .059 | | | | | | | | -.3617 | |
| .080 | | | | -.3104 | | | | | |
| .081 | | | -.1047 | | | | | | |
| .086 | | -.0169 | | | | | | | |
| .094 | .0072 | | | | | | | | |
| .150 | | | | -.2427 | -.3710 | -.3908 | -.3799 | | |
| .157 | | | | | | | | -.3644 | |
| .163 | | .0175 | | | | | | | |
| .177 | | | -.0915 | | | | | | |
| .229 | -.1497 | | | | | | | | |
| .246 | | -.0495 | | | | | | | |
| .250 | | | | -.1941 | -.3353 | -.3713 | -.3600 | | |
| .274 | | | -.1589 | | | | | | |
| .345 | | | | | | | | -.3122 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0479 | | | | | | | |
| .400 | | | | .0435 | -.0172 | | -.2897 | | |
| .402 | | | .0783 | | | | | | |
| .418 | | | | | | | | | -.2810 |
| .497 | -.0458 | | | | | | | | |
| .503 | | | | | | | | -.3066 | |
| .510 | | | | .1192 | .1083 | | | | |
| .569 | | | .1387 | | | | | | |
| [illegible] | | | | | | | -.2316 | | |
| [illegible] | | .1449 | | | | | | | |
| [illegible] | | | | | | .1043 | | | |
| [illegible] | | | | | | | | .0000 | |
| [illegible] | .0000 | | | | .1342 | | | | |
| [illegible] | | | | .0791 | | | | | |
| [illegible] | | | | | | | | | -.1981 |
| [illegible] | | | | | | .0585 | -.2405 | | |
| [illegible] | | | -.0358 | | | | | | |
| [illegible] | | | | .1838 | .1717 | | | | |

ARC97-019 IA81 LVAP(ALL HL SEALED) LEFT WING BOT. (RETL43)

ALPHAO( 1) = -6.289 BETAO ( 1) = .408

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .798 | | -.1159 | | | | | | | |
| .808 | | | .0078 | | | | | | |
| .834 | -.1908 | | | | | | | | |
| .839 | | -.0544 | | | | | | | |
| .850 | | | | -.0537 | -.0480 | -.0870 | | | |
| .857 | | | -.1274 | | | | | | |
| .862 | | | | | | | | -.2584 | |
| .869 | -.1100 | | | | | | | | |
| .879 | | -.1238 | | | | | | | |
| .900 | -.1802 | | | -.1777 | | | -.1141 | | |
| .905 | | | -.2412 | | | | | | |
| .919 | | -.2507 | | | | | | | |
| .950 | | | | -.2718 | -.2195 | -.1696 | | | |
| .953 | | | -.3004 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2464 | | | | | | | | |
| 1.000 | | | -.3037 | | -.2114 | | -.2661 | | |

ALPHAO( 2) = -4.227 BETAO ( 1) = -3.808

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0386 | .0262 | .3111 | .6834 | .6068 | .5784 | .6021 | -.2567 | |
| .010 | .1093 | -.0009 | .1213 | -.0981 | -.2148 | -.1528 | -.1181 | | |
| .020 | .0844 | -.0554 | .0578 | -.2210 | -.2696 | -.3027 | -.3090 | -.3760 | |
| .040 | | -.0590 | .0307 | | | | | | |
| .050 | -.0099 | | | -.2365 | -.3012 | -.3373 | -.3387 | | |
| .069 | | | | | | | | -.3955 | |
| .080 | | | | -.2123 | | | | | |
| .081 | | | -.0377 | | | | | | |
| .088 | | .0497 | | | | | | | |
| .094 | .0507 | | | | | | | | |
| .130 | | | | -.2084 | .0699 | .2950 | -.3138 | | |
| .[illegible] | | | | | | | | -.3843 | |
| .193 | | .1132 | | | | | | | |
| .177 | | | -.0788 | | | | | | |
| 229 | -.0742 | | | | | | | | |
| 248 | | -.1077 | | | | | | | |
| 250 | | | | -.1100 | .[illegible] | .2978 | .2954 | | |
| .274 | | | -.1320 | | | | | | |
| 348 | | | | | | | | -.3877 | |
| 352 | .0000 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL43)

ALPHA0( 2) = -4.227 BETA0 ( 1) = -3.808

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .390 | | -.0184 | | | | | | | |
| .400 | | | | .0533 | -.1444 | | -.2481 | | |
| .402 | | | .0821 | | | | | | |
| .418 | | | | | | | | | -.3432 |
| .497 | .0028 | | | | | | | | |
| .503 | | | | | | | | -.2950 | |
| .550 | | | | .2377 | .2004 | | | | |
| .565 | | | .2310 | | | | | | |
| .600 | | | | | | | -.1225 | | |
| .637 | | .2550 | | | | | | | |
| .650 | | | | | | .1410 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2126 | | | | |
| .725 | | | | .1856 | | | | | |
| .730 | | | | | | | | | -.3415 |
| .750 | | | | | | .1406 | -.1165 | | |
| .760 | | | .0730 | | | | | | |
| .775 | | | | .2951 | .2281 | | | | |
| .798 | | -.0168 | | | | | | | |
| .808 | | | .1054 | | | | | | |
| .834 | -.1565 | | | | | | | | |
| .839 | | -.0099 | | | | | | | |
| .850 | | | | .0497 | .0191 | -.0007 | | | |
| .857 | | | -.0694 | | | | | | |
| .862 | | | | | | | | -.2100 | |
| .865 | -.0198 | | | | | | | | |
| .879 | | -.0787 | | | | | | | |
| .900 | -.1153 | | | -.0880 | | | .0054 | | |
| .905 | | | -.1961 | | | | | | |
| .919 | | -.1934 | | | | | | | |
| .950 | | | | -.1087 | -.1698 | -.1211 | | | |
| .953 | | | -.2452 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2641 | | | | | | | | |
| 1.000 | | | -.2858 | | -.1832 | | -.2623 | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL43)

ALPHAO( 2) = -4.204 BETAO ( 2) = .384

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0466 | -.0391 | .2356 | .5211 | .5066 | .4655 | .4887 | -.3193 | |
| .010 | .0022 | -.0578 | .0540 | -.1557 | -.2787 | -.2095 | -.1830 | | |
| .020 | .0263 | -.0942 | -.0110 | -.2643 | -.3235 | -.3584 | -.3500 | -.3894 | |
| .040 | | -.0787 | -.1237 | | | | | | |
| .050 | -.0573 | | | -.2601 | -.3516 | -.3906 | -.3831 | | |
| .069 | | | | | | | | -.4003 | |
| .080 | | | | -.2507 | | | | | |
| .081 | | | -.0721 | | | | | | |
| .086 | | -.0043 | | | | | | | |
| .094 | .0065 | | | | | | | | |
| .150 | | | | -.2027 | -.3120 | -.3294 | -.3546 | | |
| .157 | | | | | | | | -.3990 | |
| .163 | | .0259 | | | | | | | |
| .177 | | | -.0619 | | | | | | |
| .229 | -.1406 | | | | | | | | |
| .246 | | -.0354 | | | | | | | |
| .250 | | | | -.1755 | -.2783 | -.3238 | -.3007 | | |
| .274 | | | -.1565 | | | | | | |
| .345 | | | | | | | | -.3624 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0459 | | | | | | | |
| .400 | | | | .0951 | .1020 | | -.2445 | | |
| .402 | | | .1138 | | | | | | |
| .418 | | | | | | | | | -.3767 |
| .497 | -.0451 | | | | | | | | |
| .503 | | | | | | | | -.2821 | |
| .550 | | | | .2144 | .1933 | | | | |
| .565 | | | .2064 | | | | | | |
| .600 | | | | | | | -.1014 | | |
| .637 | | .2035 | | | | | | | |
| .650 | | | | | | .1850 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1823 | | | | |
| .725 | | | | .1209 | | | | | |
| .730 | | | | | | | | | -.1607 |
| .750 | | | | | | .0923 | .1297 | | |
| .760 | | | -.0130 | | | | | | |
| .775 | | | | .2170 | .2319 | | | | |
| .798 | | -.1084 | | | | | | | |
| .808 | | | .0383 | | | | | | |
| .834 | -.2077 | | | | | | | | |
| .839 | | -.0783 | | | | | | | |
| .850 | | | | -.0290 | -.0245 | -.0488 | | | |
| .857 | | | -.1278 | | | | | | |
| .862 | | | | | | | | -.2400 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL43)

ALPHAO( 2) = -4.204 BETAO ( 2) = .384

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.1128 | | | | | | | | |
| .879 | | -.1168 | | | | | | | |
| .900 | -.1769 | | | -.1612 | | | -.0711 | | |
| .905 | | | -.2498 | | | | | | |
| .919 | | -.2372 | | | | | | | |
| .950 | | | | -.2613 | -.2254 | -.1569 | | | |
| .953 | | | -.2932 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2552 | | | | | | | | |
| 1.000 | | | -.3096 | | -.2105 | | -.2558 | | |

ALPHAO( 2) = -4.189 BETAO ( 3) = 3.933

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0981 | -.0872 | .1884 | .4272 | .4561 | .4326 | .4826 | -.1226 | |
| .010 | -.0920 | -.0738 | .0783 | -.2295 | -.3165 | -.2122 | -.1685 | | |
| .020 | -.0864 | -.0467 | .0428 | -.3306 | -.3495 | -.2019 | -.1794 | -.1173 | |
| .040 | | -.0402 | -.0890 | | | | | | |
| .050 | -.1125 | | | -.2899 | -.3250 | -.1899 | -.1698 | | |
| .069 | | | | | | | | -.1007 | |
| .080 | | | | -.2663 | | | | | |
| .081 | | | -.0992 | | | | | | |
| .086 | | -.0363 | | | | | | | |
| .094 | -.0940 | | | | | | | | |
| .150 | | | | -.0821 | -.1072 | -.1807 | -.1451 | | |
| .157 | | | | | | | | -.1001 | |
| .163 | | -.0552 | | | | | | | |
| .177 | | | -.0116 | | | | | | |
| .229 | -.0815 | | | | | | | | |
| .246 | | .0194 | | | | | | | |
| .250 | | | | .2912 | .2192 | -.0952 | -.0958 | | |
| .270 | | | .0893 | | | | | | |
| .345 | | | | | | | | -.1308 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1121 | | | | | | | |
| .400 | | | | .2390 | .1398 | | -.0687 | | |
| .402 | | | .2543 | | | | | | |
| .419 | | | | | | | | | -.0771 |
| .497 | .0579 | | | | | | | | |
| .503 | | | | | | | | -.3650 | |
| .550 | | | | .1238 | .0794 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL43)

ALPHAO( 2) = -4.169 BETAO ( 3) = 3.933

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .1567 | | | | | | |
| .600 | | | | | | | -.0448 | | |
| .637 | | .1495 | | | | | | | |
| .650 | | | | | | .1753 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1353 | | | | |
| .725 | | | | .0148 | | | | | |
| .730 | | | | | | | | | -.1112 |
| .750 | | | | | | .0517 | .0570 | | |
| .760 | | | -.1415 | | | | | | |
| .775 | | | | .1016 | .1501 | | | | |
| .798 | | -.1574 | | | | | | | |
| .808 | | | -.0195 | | | | | | |
| .834 | -.1551 | | | | | | | | |
| .839 | | -.0472 | | | | | | | |
| .850 | | | | -.0980 | -.0809 | -.1002 | | | |
| .857 | | | -.1136 | | | | | | |
| .862 | | | | | | | | -.1456 | |
| .865 | -.1026 | | | | | | | | |
| .879 | | -.1532 | | | | | | | |
| .900 | -.1459 | | | -.1949 | | | -.1150 | | |
| .905 | | | -.2333 | | | | | | |
| .919 | | -.2194 | | | | | | | |
| .950 | | | | -.2771 | -.2368 | -.2012 | | | |
| .953 | | | -.2819 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1912 | | | | | | | | |
| 1.000 | | | -.2018 | | -.2552 | | -.2171 | | |

ALPHAO( 3) = -2.122 BETAO ( 1) = .375

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0523 | -.0721 | .2390 | .5010 | .5493 | .5350 | .5563 | -.2335 | |
| .010 | -.0138 | -.0793 | .0926 | -.1043 | -.2035 | -.1441 | -.0937 | | |
| .020 | .0031 | -.0968 | .0382 | -.2211 | -.2629 | -.2800 | -.2724 | -.2834 | |
| .040 | | -.0636 | .0414 | | | | | | |
| .050 | -.0888 | | | -.2085 | -.2851 | -.3101 | -.3034 | | |
| .069 | | | | | | | | -.2833 | |
| .080 | | | | -.1988 | | | | | |
| .081 | | | -.0832 | | | | | | |
| .088 | | -.0145 | | | | | | | |

ARC87-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL43)

ALPHA( 3) = -2.122 BETA( 1) = .375

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | .0198 | | | | | | | | |
| .150 | | | | -.1050 | -.2127 | -.2483 | -.2757 | | |
| .157 | | | | | | | | -.2811 | |
| .163 | | .0693 | | | | | | | |
| .177 | | | -.0230 | | | | | | |
| .229 | -.1462 | | | | | | | | |
| .246 | | -.0268 | | | | | | | |
| .250 | | | | -.1444 | -.1465 | -.2179 | -.2189 | | |
| .274 | | | -.1090 | | | | | | |
| .345 | | | | | | | | -.2242 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0114 | | | | | | | |
| .400 | | | | .2248 | .1788 | | -.1729 | | |
| .402 | | | .1958 | | | | | | |
| .418 | | | | | | | | | -.2559 |
| .497 | -.0356 | | | | | | | | |
| .503 | | | | | | | | -.0156 | |
| .550 | | | | .2574 | .2973 | | | | |
| .565 | | | .2514 | | | | | | |
| .600 | | | | | | | .1864 | | |
| .637 | | .2481 | | | | | | | |
| .650 | | | | | | .2354 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2020 | | | | |
| .725 | | | | .1409 | | | | | |
| .730 | | | | | | | | | -.1222 |
| .750 | | | | | | .1072 | .1530 | | |
| .760 | | | .0182 | | | | | | |
| .775 | | | | .2464 | .2372 | | | | |
| .798 | | -.0704 | | | | | | | |
| .808 | | | .0424 | | | | | | |
| .824 | -.2109 | | | | | | | | |
| .839 | | -.0758 | | | | | | | |
| .850 | | | | -.0120 | -.0232 | -.0356 | | | |
| .857 | | | -.1215 | | | | | | |
| .862 | | | | | | | | -.0957 | |
| .865 | -.0814 | | | | | | | | |
| .879 | | -.1308 | | | | | | | |
| .900 | -.1840 | | | -.1494 | | | -.0487 | | |
| .909 | | | -.2497 | | | | | | |
| .919 | | -.2308 | | | | | | | |
| .950 | | | | -.2574 | -.2250 | -.1522 | | | |
| .953 | | | -.2945 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2854 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL43)

ALPHAO( 3) = -2.122 BETAO ( 1) = .375

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.3073 | | -.2153 | | -.2682 | | |

ALPHAO( 4) = -.030 BETAO ( 1) = -5.879

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0718 | .0678 | .3774 | .7725 | .7504 | .7303 | .7460 | -.0271 | |
| .010 | .0311 | .0608 | .2682 | .0699 | -.0438 | .0047 | .1014 | | |
| .020 | .0219 | .0023 | .2021 | -.0582 | -.0770 | -.1028 | -.1301 | -.0938 | |
| .040 | | .0013 | .0776 | | | | | | |
| .050 | .0666 | | | -.0395 | -.0845 | -.1260 | -.1482 | | |
| .069 | | | | | | | | -.1183 | |
| .080 | | | | -.0795 | | | | | |
| .081 | | | .0488 | | | | | | |
| .088 | | .1110 | | | | | | | |
| .094 | .1480 | | | | | | | | |
| .150 | | | | -.0517 | -.0868 | -.0879 | -.1034 | | |
| .157 | | | | | | | | -.0809 | |
| .163 | | .1425 | | | | | | | |
| .177 | | | .0313 | | | | | | |
| .229 | -.0312 | | | | | | | | |
| .248 | | -.0540 | | | | | | | |
| .250 | | | | -.0017 | -.0282 | -.0203 | -.0482 | | |
| .274 | | | -.0303 | | | | | | |
| .345 | | | | | | | | -.0575 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0835 | | | | | | | |
| .400 | | | | .3488 | .2438 | | .0248 | | |
| .402 | | | .2989 | | | | | | |
| .418 | | | | | | | | | -.0840 |
| .497 | .0801 | | | | | | | | |
| .503 | | | | | | | | .1333 | |
| .550 | | | | .4834 | .4837 | | | | |
| .585 | | | .4930 | | | | | | |
| .600 | | | | | | | .2850 | | |
| .637 | | .5112 | | | | | | | |
| .650 | | | | | | .3876 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2838 | | | | |
| .725 | | | | .2510 | | | | | |
| .730 | | | | | | | | | -.0884 |
| .750 | | | | | | .1841 | .1851 | | |

ARC97-019 IA81 LVAP(ALLML SEALED) LEFT WING BOT. (RETL43)

ALPHAO( 4) = -.030 BETAO ( 1) = -5.879

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .1273 | | | | | | |
| .775 | | | | | .3959 | .3203 | | | |
| .798 | | .0535 | | | | | | | |
| .808 | | | .1950 | | | | | | |
| .834 | -.1278 | | | | | | | | |
| .839 | | .0317 | | | | | | | |
| .850 | | | | | .1205 | .0696 | .0324 | | |
| .857 | | | -.0010 | | | | | | |
| .862 | | | | | | | | -.0148 | |
| .865 | -.0111 | | | | | | | | |
| .879 | | -.0550 | | | | | | | |
| .900 | -.0827 | | | -.0425 | | | .0023 | | |
| .905 | | | -.1663 | | | | | | |
| .919 | | -.1438 | | | | | | | |
| .950 | | | | -.1795 | -.1292 | -.0945 | | | |
| .953 | | | -.2316 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2151 | | | | | | | | |
| 1.000 | | | -.2635 | | -.2687 | | -.2428 | | |

ALPHAO( 4) = -.027 BETAO ( 2) = -3.845

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0264 | .0187 | .3425 | .7266 | .7105 | .6852 | .6962 | -.0533 | |
| .010 | .1116 | .0352 | .2670 | .0401 | -.0683 | -.0209 | .0720 | | |
| .020 | .1178 | .0209 | .2455 | -.0851 | -.1071 | -.1301 | -.1442 | -.1173 | |
| .040 | | .0446 | .1325 | | | | | | |
| .050 | .0201 | | | -.0745 | -.1172 | -.1429 | -.1642 | | |
| .093 | | | | | | | | -.1354 | |
| .088 | | | | -.1079 | | | | | |
| .091 | | | -.0135 | | | | | | |
| .088 | | .0558 | | | | | | | |
| .094 | .0681 | | | | | | | | |
| .150 | | | | -.1089 | -.1120 | -.1018 | -.1239 | | |
| .157 | | | | | | | | -.1022 | |
| .183 | | .1444 | | | | | | | |
| .177 | | | -.0262 | | | | | | |
| .209 | .0168 | | | | | | | | |
| .245 | | -.0807 | | | | | | | |
| .250 | | | | -.0228 | -.0573 | -.0560 | -.0670 | | |
| .274 | | | -.0528 | | | | | | |

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

APC97-019 !A81 LVAP(ALL'S SEALED) LEFT WING BOT. (RETL43)

ALPHAO( ) = -.027 BETAO ( 2) = -3.845

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | -.0776 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0558 | | | | | | | |
| .400 | | | | .2892 | .0719 | | -.0037 | | |
| .402 | | | .2485 | | | | | | |
| .418 | | | | | | | | | -.0920 |
| .497 | .0155 | | | | | | | | |
| .503 | | | | | | | | .0554 | |
| .550 | | | | .4501 | .4803 | | | | |
| .565 | | | .4361 | | | | | | |
| .600 | | | | | | | .2317 | | |
| .637 | | .4342 | | | | | | | |
| .650 | | | | | | .3673 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2716 | | | | |
| .725 | | | | .2378 | | | | | |
| .730 | | | | | | | | | -.0949 |
| .750 | | | | | | .1725 | .1662 | | |
| .760 | | | .1181 | | | | | | |
| .775 | | | | .3704 | .3155 | | | | |
| .798 | | .0372 | | | | | | | |
| .808 | | | .1656 | | | | | | |
| .834 | -.1804 | | | | | | | | |
| .839 | | .0008 | | | | | | | |
| .850 | | | | .0981 | .0481 | .0210 | | | |
| .857 | | | -.0187 | | | | | | |
| .862 | | | | | | | | -.0293 | |
| .865 | -.0532 | | | | | | | | |
| .879 | | -.1043 | | | | | | | |
| .900 | -.1019 | | | -.0505 | | | -.0093 | | |
| .905 | | | -.1790 | | | | | | |
| .919 | | -.1542 | | | | | | | |
| .950 | | | | -.1851 | -.1413 | -.1065 | | | |
| .953 | | | -.2578 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2575 | | | | | | | | |
| 1.000 | | | -.2790 | | -.2568 | | -.2542 | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL43)

ALPHA0( 41 = -.030 BETA0 ( 3) = -1.739

SECTION ( 11)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0427 | -.0451 | .3098 | .6702 | .6681 | .6453 | .6475 | -.0904 | |
| .010 | .0576 | .0138 | .2412 | .0017 | -.0933 | -.0483 | .0433 | | |
| .020 | .0446 | .0497 | .2098 | -.1176 | -.1369 | -.1572 | -.1693 | -.1418 | |
| .040 | | .0500 | .0846 | | | | | | |
| .050 | -.0299 | | | -.1048 | -.1533 | -.1809 | -.1879 | | |
| .069 | | | | | | | | -.1444 | |
| .080 | | | | -.1314 | | | | | |
| .081 | | | -.0506 | | | | | | |
| .086 | | .0019 | | | | | | | |
| .094 | .0185 | | | | | | | | |
| .150 | | | | -.0664 | -.1130 | -.1275 | -.1497 | | |
| .157 | | | | | | | | -.1238 | |
| .163 | | .1040 | | | | | | | |
| .177 | | | .0135 | | | | | | |
| .229 | -.0005 | | | | | | | | |
| .246 | | .0175 | | | | | | | |
| .250 | | | | -.0280 | -.0742 | -.0929 | -.0897 | | |
| .274 | | | -.0448 | | | | | | |
| .345 | | | | | | | | -.0714 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0197 | | | | | | | |
| .400 | | | | .2646 | .2455 | | -.0088 | | |
| .402 | | | .2521 | | | | | | |
| .418 | | | | | | | | | -.1007 |
| .497 | .0109 | | | | | | | | |
| .503 | | | | | | | | .0940 | |
| .550 | | | | .4120 | .4377 | | | | |
| .565 | | | .3408 | | | | | | |
| .600 | | | | | | | .2587 | | |
| .637 | | .3281 | | | | | | | |
| .650 | | | | | | .3229 | | | |
| .6[illegible] | | | | | | | | .0000 | |
| .7[illegible] | .0000 | | | | .2525 | | | | |
| .7[illegible] | | | | .2042 | | | | | |
| .7[illegible] | | | | | | | | | -.1652 |
| .[illegible] | | | | | | .1522 | .1744 | | |
| .760 | | | .0655 | | | | | | |
| .775 | | | | .3236 | .2912 | | | | |
| .798 | | .0188 | | | | | | | |
| .808 | | | .1[illegible]2 | | | | | | |
| .874 | -.1528 | | | | | | | | |
| .889 | | -.0052 | | | | | | | |
| .892 | | | | .0587 | .0235 | -.0041 | | | |
| .897 | | | -.0519 | | | | | | |

ARC97-019 TAB1 (VAPTAILCHL SEALED) LEFT WING BOT. (RET_43)

ALPHAO( 4) = -.030 BETAO ( 3) = -1.739

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.0201 | | | | | | | | |
| .879 | | -.0814 | | | | | | | |
| .900 | -.1129 | | | -.0904 | | | -.0186 | | |
| .905 | | | -.1878 | | | | | | |
| .919 | | -.1797 | | | | | | | |
| .950 | | | | -.1963 | -.1735 | -.1265 | | | |
| .953 | | | -.2391 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2614 | | | | | | | | |
| 1.000 | | | -.2857 | | -.2149 | | -.2695 | | |

ALPHAO( 4) = -.019 BETAO ( 4) = .351

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0667 | -.0974 | .2563 | .5191 | .6159 | .5975 | .6059 | -.1184 | |
| .010 | -.0152 | -.0903 | .1866 | -.0165 | -.1164 | -.0745 | .0073 | | |
| .020 | .0207 | -.0641 | .2202 | -.1251 | -.1589 | -.1797 | -.1912 | -.1655 | |
| .040 | | -.0127 | .1064 | | | | | | |
| .050 | -.0654 | | | -.1030 | -.1635 | -.2056 | -.2107 | | |
| .069 | | | | | | | | -.1360 | |
| .080 | | | | -.1289 | | | | | |
| .081 | | | -.0444 | | | | | | |
| .090 | | -.0105 | | | | | | | |
| .094 | .0228 | | | | | | | | |
| .150 | | | | -.0181 | -.1087 | -.1324 | -.1712 | | |
| .157 | | | | | | | | -.1213 | |
| .163 | | .0948 | | | | | | | |
| .177 | | | .0109 | | | | | | |
| .229 | -.0787 | | | | | | | | |
| .246 | | .0087 | | | | | | | |
| .250 | | | | -.0459 | -.0738 | -.0802 | -.1125 | | |
| .274 | | | .0815 | | | | | | |
| .345 | | | | | | | | .0370 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1537 | | | | | | | |
| .400 | | | | .2741 | .2488 | | .0562 | | |
| .402 | | | .2725 | | | | | | |
| .418 | | | | | | | | | -.0535 |
| .467 | .0872 | | | | | | | | |
| .503 | | | | | | | | .0918 | |
| .550 | | | | .4015 | .4183 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL43)

ALPHAO( 4) = -.018 BETAO ( 4) = .351

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .8720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .2898 | | | | | | |
| .600 | | | | | | | .3239 | | |
| .637 | | .2799 | | | | | | | |
| .650 | | | | | | .2908 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2226 | | | | |
| .725 | | | | .1550 | | | | | |
| .730 | | | | | | | | | -.2963 |
| .750 | | | | | | .1221 | .1388 | | |
| .760 | | | .0438 | | | | | | |
| .775 | | | | .2690 | .2581 | | | | |
| .798 | | -.0530 | | | | | | | |
| .808 | | | .0512 | | | | | | |
| .834 | -.2192 | | | | | | | | |
| .838 | | -.0684 | | | | | | | |
| .850 | | | | .0119 | -.0115 | -.0303 | | | |
| .857 | | | -.1038 | | | | | | |
| .862 | | | | | | | | -.0718 | |
| .865 | -.0810 | | | | | | | | |
| .879 | | -.1401 | | | | | | | |
| .900 | -.1518 | | | -.1322 | | | -.0539 | | |
| .905 | | | -.2389 | | | | | | |
| .919 | | -.2259 | | | | | | | |
| .950 | | | | -.2478 | - .1 | -.1520 | | | |
| .953 | | | -.2935 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2798 | | | | | | | | |
| 1.000 | | | -.3071 | | -.2280 | | -.2799 | | |

ALPHAO( 4) = -.003 BETAO ( 5) = 2.455

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .8720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0949 | -.1341 | .2643 | .5837 | .3490 | .5489 | .6581 | -.0424 | |
| .010 | -.0541 | -.1122 | .2289 | -.0424 | -.1500 | -.1023 | .0388 | | |
| .020 | -.0142 | -.0729 | .1964 | -.1478 | -.1799 | -.2020 | -.1713 | -.0307 | |
| .040 | | -.0501 | .0564 | | | | | | |
| .050 | -.0726 | | | -.1210 | -.1892 | -.1838 | -.1642 | | |
| .069 | | | | | | | | -.0089 | |
| .080 | | | | -.0997 | | | | | |
| .081 | | | -.0523 | | | | | | |
| .088 | | -.0182 | | | | | | | |

ARC97-019 IA81 LVAP(ALLML SEALED) LEFT WING BOT. (RETL43)

ALPHA0( 4) = -.003 BETA0 ( 5) = 2.455

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8970 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0346 | | | | | | | | |
| .150 | | | | -.0127 | -.0806 | -.1056 | -.0653 | | |
| .157 | | | | | | | | .0182 | |
| .163 | | .0256 | | | | | | | |
| .177 | | | .0308 | | | | | | |
| .229 | -.0411 | | | | | | | | |
| .246 | | .0334 | | | | | | | |
| .250 | | | | .1892 | .2303 | .1518 | .1910 | | |
| .274 | | | .1735 | | | | | | |
| .345 | | | | | | | | .2435 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1786 | | | | | | | |
| .400 | | | | .2159 | .1833 | | .2198 | | |
| .402 | | | .2394 | | | | | | |
| .418 | | | | | | | | | .0355 |
| .497 | .1109 | | | | | | | | |
| .503 | | | | | | | | .2549 | |
| .550 | | | | .2146 | .3993 | | | | |
| .565 | | | .2098 | | | | | | |
| .600 | | | | | | | .3220 | | |
| .637 | | .1974 | | | | | | | |
| .650 | | | | | | .3222 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2402 | | | | |
| .725 | | | | .1088 | | | | | |
| .730 | | | | | | | | | -.3287 |
| .750 | | | | | | .1276 | .1231 | | |
| .760 | | | -.0538 | | | | | | |
| .775 | | | | .2324 | .2491 | | | | |
| .798 | | -.1412 | | | | | | | |
| .808 | | | .0102 | | | | | | |
| .834 | -.1812 | | | | | | | | |
| .839 | | -.0808 | | | | | | | |
| .850 | | | | -.0074 | -.0185 | -.0305 | | | |
| .857 | | | -.1401 | | | | | | |
| .882 | | | | | | | | -.0989 | |
| .885 | -.0938 | | | | | | | | |
| .879 | | -.1268 | | | | | | | |
| .900 | -.1724 | | | -.1487 | | | -.0882 | | |
| .905 | | | -.2274 | | | | | | |
| .919 | | -.2403 | | | | | | | |
| .950 | | | | -.2592 | -.2122 | -.1855 | | | |
| .953 | | | -.2721 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2098 | | | | | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL43)

ALPHAO( 4) = -.003 BETAO ( 5) = 2.455

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.2753 | | -.2049 | | -.2678 | | |

ALPHAO( 4) = .009 BETAO ( 6) = 3.897

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1199 | -.1289 | .2421 | .5816 | .6551 | .6101 | .6066 | .0041 | |
| .010 | -.0931 | -.0999 | .2321 | .0981 | .0853 | .0522 | .0901 | | |
| .020 | -.0782 | -.0792 | .2085 | .0853 | .1173 | .0175 | -.0920 | .0208 | |
| .040 | | -.0683 | .1808 | | | | | | |
| .050 | -.0814 | | | .1286 | .0885 | .0589 | -.0225 | | |
| .069 | | | | | | | | .0091 | |
| .080 | | | | .1671 | | | | | |
| .081 | | | .1466 | | | | | | |
| .086 | | -.0121 | | | | | | | |
| .094 | -.0739 | | | | | | | | |
| .150 | | | | .2992 | .2123 | .1287 | .0739 | | |
| .157 | | | | | | | | .0104 | |
| .163 | | .1257 | | | | | | | |
| .177 | | | .1310 | | | | | | |
| .229 | -.0229 | | | | | | | | |
| .248 | | .1387 | | | | | | | |
| .250 | | | | .2107 | .1378 | .1122 | .0773 | | |
| .274 | | | .3035 | | | | | | |
| .345 | | | | | | | | .1154 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .2759 | | | | | | | |
| .400 | | | | .2384 | .2195 | | .1128 | | |
| .402 | | | .2359 | | | | | | |
| .418 | | | | | | | | | -.0770 |
| .497 | .1632 | | | | | | | | |
| .503 | | | | | | | | .1875 | |
| .550 | | | | .2378 | .3103 | | | | |
| .565 | | | .2120 | | | | | | |
| .600 | | | | | | | .2322 | | |
| .637 | | .1977 | | | | | | | |
| .650 | | | | | | .2164 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1313 | | | | |
| .725 | | | | .0458 | | | | | |
| .730 | | | | | | | | | -.3579 |
| .750 | | | | | | .0534 | .0685 | | |

[illegible] PRESSURE REPORT DATA TABULATION

[illegible]

ALPHA0( [illegible] ) = .009 BETA0 ( [illegible] ) = 8.607

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7900 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | -.1121 | | | | | | |
| .775 | | | | -.1407 | -.1787 | | | | |
| .798 | | -.1474 | | | | | | | |
| .808 | | | -.0218 | | | | | | |
| .834 | -.1324 | | | | | | | | |
| .839 | | -.0469 | | | | | | | |
| .850 | | | | -.0798 | -.0680 | -.0900 | | | |
| .857 | | | -.1263 | | | | | | |
| .862 | | | | | | | | -.1400 | |
| .865 | -.0824 | | | | | | | | |
| .879 | | -.1555 | | | | | | | |
| .900 | -.1639 | | | .1953 | | | -.1177 | | |
| .905 | | | -.2456 | | | | | | |
| .919 | | -.2434 | | | | | | | |
| .950 | | | | -.2867 | -.2282 | -.2133 | | | |
| .953 | | | -.3040 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1982 | | | | | | | | |
| 1.000 | | | -.2434 | | -.2601 | | -.2876 | | |

ALPHA0( 4) = .019 BETA0 ( 7) = 8.597

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7900 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1684 | - 0211 | .3193 | .6023 | .5684 | .5073 | .5495 | -.0095 | |
| .010 | -.1492 | -.0158 | .3328 | .0688 | -.0128 | -.0514 | .0281 | | |
| .020 | -.1340 | .0236 | .3093 | .0766 | .0379 | -.0870 | -.1488 | .0088 | |
| .040 | | .0458 | .2183 | | | | | | |
| .050 | -.1088 | | | .0883 | .0185 | -.0306 | -.0728 | | |
| .069 | | | | | | | | .0006 | |
| .080 | | | | .1931 | | | | | |
| .081 | | | .1454 | | | | | | |
| .088 | | .0525 | | | | | | | |
| .094 | -.1183 | | | | | | | | |
| .150 | | | | .1480 | .1416 | .1048 | .0867 | | |
| .157 | | | | | | | | .0459 | |
| .163 | | .1974 | | | | | | | |
| .177 | | | .2284 | | | | | | |
| .229 | .0844 | | | | | | | | |
| .248 | | .1476 | | | | | | | |
| .250 | | | | .2172 | .1432 | .1223 | .1038 | | |
| .274 | | | .2383 | | | | | | |

ARC97-018 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL43)

ALPHAO( 4) = .018 BETAO ( 7) = 6.587

SECTION ( 11)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .1782 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .2579 | | | | | | | |
| .400 | | | | .2245 | .2055 | | .1990 | | |
| .402 | | | .2584 | | | | | | |
| .418 | | | | | | | | | -.0856 |
| .497 | .2266 | | | | | | | | |
| .503 | | | | | | | | .1272 | |
| .550 | | | | .1934 | .2681 | | | | |
| .565 | | | .2017 | | | | | | |
| .600 | | | | | | | .1831 | | |
| .637 | | .1962 | | | | | | | |
| .650 | | | | | | .1763 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1113 | | | | |
| .725 | | | | -.0054 | | | | | |
| .730 | | | | | | | | | -.3987 |
| .750 | | | | | | .0150 | .0228 | | |
| .760 | | | -.1366 | | | | | | |
| .775 | | | | .0798 | .1492 | | | | |
| .798 | | -.1405 | | | | | | | |
| .808 | | | -.0082 | | | | | | |
| .834 | -.1378 | | | | | | | | |
| .839 | | -.0422 | | | | | | | |
| .850 | | | | -.0973 | -.0969 | -.1235 | | | |
| .857 | | | -.1228 | | | | | | |
| .862 | | | | | | | | -.1888 | |
| .865 | -.0793 | | | | | | | | |
| .879 | | -.1546 | | | | | | | |
| .900 | -.1468 | | | -.1965 | | | -.1636 | | |
| .905 | | | -.2493 | | | | | | |
| .919 | | -.2336 | | | | | | | |
| .950 | | | | -.2809 | -.2422 | -.2412 | | | |
| .953 | | | -.2918 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1859 | | | | | | | | |
| 1.000 | | | -.1748 | | -.2740 | | -.2965 | | |

TABLE - PRESSURE SOURCE DATA TABULATION

ARGBT-0018 TABLE VARIATION: WALEDI CLEFT W FOR 30°

ALPHA0( F) = 3.072 BETA0 ( ) = .352

SECTION - LEFT WING BOTTOM DEPENDENT VARIABLE CP

| X/CW | Y/SW .2950 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9700 | 1.0700 |
|---|---|---|---|---|---|---|---|---|---|
| .000 | - 0857 | -.1137 | .3133 | .6598 | .6660 | .8391 | 83 | .0348 | |
| .010 | -.0322 | - 0425 | .3324 | .0016 | .0297 | .0620 | 149 | | |
| .020 | .0273 | .0010 | .4-45 | .0419 | .0788 | -.0148 | - 500 | .0497 | |
| .040 | | .0126 | 1245 | | | | | | |
| .050 | -.0553 | | | -.0119 | -.0433 | -.0620 | .0722 | | |
| .069 | | | | | | | | .0621 | |
| .080 | | | | .0069 | | | | | |
| .081 | | | -.0121 | | | | | | |
| .085 | | -.0206 | | | | | | | |
| .094 | .0406 | | | | | | | | |
| .150 | | | | .0088 | .0230 | 188 | .0058 | | |
| .157 | | | | | | | | .133 | |
| .163 | | .1111 | | | | | | | |
| .177 | | | .0274 | | | | | | |
| .229 | .0458 | | | | | | | | |
| .246 | | .1097 | | | | | | | |
| 250 | | | | .2392 | .1978 | .2035 | .236 | | |
| .274 | | | .2195 | | | | | | |
| .345 | | | | | | | | .2873 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .2585 | | | | | | | |
| .400 | | | | .3021 | .2937 | | .2847 | | |
| .402 | | | .3254 | | | | | | |
| .418 | | | | | | | | | -.0861 |
| .497 | .1819 | | | | | | | | |
| .503 | | | | | | | | .2297 | |
| .550 | | | | .3533 | .4650 | | | | |
| .565 | | | .3225 | | | | | | |
| .600 | | | | | | | .3045 | | |
| .637 | | .3158 | | | | | | | |
| .650 | | | | | | .3013 | | | |
| .870 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2240 | | | | |
| .725 | | | | .1681 | | | | | |
| .730 | | | | | | | | | -.4542 |
| .750 | | | | | | .1203 | .1135 | | |
| .780 | | | .0558 | | | | | | |
| .775 | | | | .2685 | .2752 | | | | |
| .798 | | -.0330 | | | | | | | |
| .808 | | | .0543 | | | | | | |
| .834 | -.2101 | | | | | | | | |
| .839 | | -.0875 | | | | | | | |
| .850 | | | | .0256 | - 0034 | -.0290 | | | |
| 857 | | | -.0971 | | | | | | |
| .862 | | | | | | | | -.1174 | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL43)

ALPHAO( 5) = 2.072 BETAO ( 1) = .352

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.0683 | | | | | | | | |
| .879 | | -.1337 | | | | | | | |
| .900 | -.1382 | | | -.1227 | | | -.0793 | | |
| .905 | | | -.2355 | | | | | | |
| .919 | | -.2270 | | | | | | | |
| .950 | | | | -.2407 | -.2084 | -.1610 | | | |
| .953 | | | -.2953 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2709 | | | | | | | | |
| 1.000 | | | -.3095 | | -.2342 | | -.3115 | | |

ALPHAO( 6) = 3.555 BETAO ( 1) = -3.814

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0128 | -.0128 | .3735 | .7522 | .7618 | .7481 | .7505 | .1697 | |
| .010 | .0374 | .011[illegible] | .4122 | .2310 | .2213 | .2436 | .2945 | | |
| .020 | .0759 | .0 | .3950 | .1741 | .2187 | .1617 | .1139 | .2140 | |
| .040 | | .0[illegible] | .2317 | | | | | | |
| .050 | .0146 | | | .0578 | .0576 | .0834 | .1019 | | |
| .069 | | | | | | | | .2097 | |
| .080 | | | | .0257 | | | | | |
| .081 | | | .0747 | | | | | | |
| .086 | | .0991 | | | | | | | |
| .094 | .0827 | | | | | | | | |
| .150 | | | | .1192 | .1041 | .1295 | .1762 | | |
| .157 | | | | | | | | .2618 | |
| .163 | | .2319 | | | | | | | |
| .177 | | | .1187 | | | | | | |
| .229 | .0218 | | | | | | | | |
| .246 | | .1551 | | | | | | | |
| .250 | | | | .0451 | .1638 | .1975 | .2120 | | |
| .274 | | | .0780 | | | | | | |
| .345 | | | | | | | | .2977 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1255 | | | | | | | |
| .400 | | | | .4811 | .5340 | | .4804 | | |
| .402 | | | .4418 | | | | | | |
| .418 | | | | | | | | | -.1680 |
| .497 | .1198 | | | | | | | | |
| .503 | | | | | | | | .2355 | |
| .550 | | | | .4985 | .4783 | | | | |

ARC97-019 [A81 LVAP/ALLHL SEALED] LEFT WING BOT. RE[-43]

ALPHA0( 6) = 3.555 BETA0 ( 1) = -3.814

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .4969 | | | | | | |
| .600 | | | | | | | .3052 | | |
| .637 | | .4931 | | | | | | | |
| .650 | | | | | | .3311 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2576 | | | | |
| .725 | | | | .2361 | | | | | |
| .730 | | | | | | | | | -.4675 |
| .750 | | | | | | .1454 | .1341 | | |
| .760 | | | .1171 | | | | | | |
| .775 | | | | .3794 | .3506 | | | | |
| .798 | | .0502 | | | | | | | |
| .808 | | | .1655 | | | | | | |
| .834 | -.1379 | | | | | | | | |
| .839 | | .0117 | | | | | | | |
| .850 | | | | .1050 | .0531 | .0039 | | | |
| .857 | | | -.0212 | | | | | | |
| .862 | | | | | | | | -.0812 | |
| .865 | -.0312 | | | | | | | | |
| .879 | | -.1058 | | | | | | | |
| .900 | -.1217 | | | -.0542 | | | -.0524 | | |
| .905 | | | -.1831 | | | | | | |
| .919 | | -.2044 | | | | | | | |
| .950 | | | | -.1871 | -.1421 | -.1308 | | | |
| .953 | | | -.2569 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2251 | | | | | | | | |
| 1.000 | | | -.2855 | | -.3077 | | -.3258 | | |

ALPHA0( 6) = 3.560 BETA0 ( 2) = .365

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0867 | -.1208 | .2790 | .6785 | .6943 | .6819 | .6753 | .0823 | |
| .010 | -.0108 | -.0598 | .3410 | .2492 | .2300 | .2524 | .3787 | | |
| .020 | .0187 | .0070 | .3098 | .1931 | .2215 | .1914 | .2562 | .1448 | |
| .040 | | .0141 | .1524 | | | | | | |
| .050 | -.0522 | | | .1081 | .1002 | .2084 | .2820 | | |
| .069 | | | | | | | | .1459 | |
| .080 | | | | .1039 | | | | | |
| .081 | | | .0557 | | | | | | |
| .088 | | -.0054 | | | | | | | |

ARC97-018 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL43)

ALPHA( 6) = 3.560 BETA0 ( 2) = .365

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | .0621 | | | | | | | | |
| .150 | | | | .2577 | .3544 | .3067 | .2629 | | |
| .157 | | | | | | | | .1585 | |
| .163 | | .1099 | | | | | | | |
| .177 | | | .0861 | | | | | | |
| .229 | .0708 | | | | | | | | |
| .246 | | .1252 | | | | | | | |
| .250 | | | | .3233 | .2811 | .2735 | .2205 | | |
| .274 | | | .3372 | | | | | | |
| .345 | | | | | | | | .2628 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .3260 | | | | | | | |
| .400 | | | | .3132 | .3172 | | .2887 | | |
| .402 | | | .3357 | | | | | | |
| .418 | | | | | | | | | -.2964 |
| .497 | .2670 | | | | | | | | |
| .503 | | | | | | | | .2125 | |
| .550 | | | | .3570 | .4069 | | | | |
| .565 | | | .3282 | | | | | | |
| .600 | | | | | | | .2800 | | |
| .637 | | .3254 | | | | | | | |
| .650 | | | | | | .2874 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2119 | | | | |
| .725 | | | | .1518 | | | | | |
| .730 | | | | | | | | | -.5156 |
| .750 | | | | | | .1082 | .1046 | | |
| .760 | | | .0147 | | | | | | |
| .775 | | | | .2640 | .2710 | | | | |
| .798 | | -.0541 | | | | | | | |
| .808 | | | .0412 | | | | | | |
| .834 | -.2088 | | | | | | | | |
| .839 | | -.0790 | | | | | | | |
| .850 | | | | .0253 | -.0066 | -.0379 | | | |
| .857 | | | -.1160 | | | | | | |
| .962 | | | | | | | | -.1318 | |
| .655 | -.0757 | | | | | | | | |
| .879 | | -.1469 | | | | | | | |
| .900 | -.1354 | | | -.1245 | | | -.0914 | | |
| .905 | | | -.2484 | | | | | | |
| .919 | | -.2123 | | | | | | | |
| .950 | | | | -.2422 | -.2084 | -.1785 | | | |
| .953 | | | -.2988 | | | | | | |
| .955 | | .0030 | | | | | | | |
| .965 | -.2383 | | | | | | | | |

DATE 08 OCT 75 .A8:B - PRESSURE SOURCE DATA TABULATION

ARC97-019 [AR] VARIABLE SECTION LEFT WING BOT

ALPHAO( 6) = 3.560 BETAO ( 2) = .365

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.3020 | | -.2434 | | -.3502 | | |

ALPHAO( 6) = 3.578 BETAO ( 3) = 3.907

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1535 | -.2642 | .2475 | .7226 | .6803 | .6662 | .6186 | .0368 | |
| .010 | -.0867 | -.2230 | .3632 | .5460 | .3986 | .4054 | .4181 | | |
| .020 | -.0525 | -.1127 | .3877 | .4431 | .3714 | .3455 | .2950 | .1174 | |
| .040 | | -.0949 | .3424 | | | | | | |
| .050 | -.0790 | | | .3374 | .2678 | .2894 | .2773 | | |
| .069 | | | | | | | | .1322 | |
| .080 | | | | .2892 | | | | | |
| .081 | | | .2803 | | | | | | |
| .086 | | .0049 | | | | | | | |
| .094 | .0084 | | | | | | | | |
| .150 | | | | .2886 | .2843 | .2789 | .2764 | | |
| .157 | | | | | | | | .1567 | |
| .163 | | .2618 | | | | | | | |
| .177 | | | .3014 | | | | | | |
| .229 | -.0087 | | | | | | | | |
| .246 | | .2191 | | | | | | | |
| .250 | | | | .2719 | .2795 | .2700 | .2428 | | |
| .274 | | | .3055 | | | | | | |
| .345 | | | | | | | | .2232 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .3125 | | | | | | | |
| .400 | | | | .2971 | .3052 | | .2931 | | |
| .402 | | | .3112 | | | | | | |
| .418 | | | | | | | | | -.3489 |
| .497 | .2841 | | | | | | | | |
| .503 | | | | | | | | .1932 | |
| .550 | | | | .2768 | .3049 | | | | |
| .565 | | | .2532 | | | | | | |
| .600 | | | | | | | .2341 | | |
| .637 | | .2277 | | | | | | | |
| .650 | | | | | | .2122 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1231 | | | | |
| .725 | | | | .0400 | | | | | |
| .730 | | | | | | | | | -.5260 |
| .750 | | | | | | .0490 | .0835 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL43)

ALPHA0( 8) = 3.578 BETA0 ( 3) = 3.907

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | -.1107 | | | | | | |
| .775 | | | | .1293 | .1789 | | | | |
| .798 | | -.1484 | | | | | | | |
| .808 | | | -.0295 | | | | | | |
| .834 | -.1112 | | | | | | | | |
| .839 | | -.0327 | | | | | | | |
| .850 | | | | -.0648 | -.0689 | -.0840 | | | |
| .857 | | | -.1111 | | | | | | |
| .862 | | | | | | | | -.1475 | |
| .865 | -.0699 | | | | | | | | |
| .879 | | -.1382 | | | | | | | |
| .900 | -.1370 | | | -.1867 | | | -.1083 | | |
| .905 | | | -.2229 | | | | | | |
| .919 | | -.2165 | | | | | | | |
| .950 | | | | -.2806 | -.2405 | -.2106 | | | |
| .953 | | | -.2771 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1634 | | | | | | | | |
| 1.000 | | | -.1818 | | -.2320 | | -.3574 | | |

ALPHA0( 7) = 8.258 BETA0 ( 1) = .389

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0490 | -.1381 | .2607 | .7190 | .7201 | .6925 | .6509 | .0038 | |
| .010 | .0075 | -.0601 | .3602 | .5073 | .4741 | .5172 | .5515 | | |
| .020 | .0052 | .0042 | .3447 | .4391 | .4246 | .4382 | .4353 | .1360 | |
| .040 | | .0170 | .2120 | | | | | | |
| .050 | -.0467 | | | .3527 | .3040 | .3813 | .3995 | | |
| .059 | | | | | | | | .1771 | |
| .060 | | | | .3113 | | | | | |
| .081 | | | .2534 | | | | | | |
| .086 | | .0775 | | | | | | | |
| .094 | .0573 | | | | | | | | |
| .150 | | | | .2549 | .3199 | .3445 | .3528 | | |
| .157 | | | | | | | | .2175 | |
| .163 | | .1287 | | | | | | | |
| .177 | | | .2629 | | | | | | |
| .229 | .1084 | | | | | | | | |
| .246 | | .2424 | | | | | | | |
| .250 | | | | .3085 | .3177 | .3284 | .3208 | | |
| .274 | | | .2951 | | | | | | |

ARC97-019 TAB1 (VAPIALLML SCALED) LEFT WING BOT (RETU

ALPHA0( 7) = 6.258 BETA0 ( 1) = .389

SECTION = 1(LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8670 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .2253 | |
| .382 | .0000 | | | | | | | | |
| .390 | | .3170 | | | | | | | |
| .400 | | | | .3489 | .3702 | | .3775 | | |
| .402 | | | .3555 | | | | | | |
| .418 | | | | | | | | | -.4082 |
| .497 | .3040 | | | | | | | | |
| .503 | | | | | | | | .1745 | |
| .550 | | | | .3391 | .3642 | | | | |
| .565 | | | .3321 | | | | | | |
| .600 | | | | | | | .2537 | | |
| .637 | | .3310 | | | | | | | |
| .650 | | | | | | .2589 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1817 | | | | |
| .725 | | | | .1138 | | | | | |
| .730 | | | | | | | | | -.5375 |
| .750 | | | | | | .0854 | .0947 | | |
| .760 | | | -.0383 | | | | | | |
| .775 | | | | .2233 | .2538 | | | | |
| .798 | | -.0873 | | | | | | | |
| .808 | | | .0253 | | | | | | |
| .834 | -.1703 | | | | | | | | |
| .839 | | -.0769 | | | | | | | |
| .850 | | | | .0078 | -.0154 | -.0502 | | | |
| .857 | | | -.1262 | | | | | | |
| .862 | | | | | | | | -.1352 | |
| .865 | -.0622 | | | | | | | | |
| .879 | | -.1216 | | | | | | | |
| .900 | -.1422 | | | -.1334 | | | -.1008 | | |
| .905 | | | -.2386 | | | | | | |
| .919 | | -.2075 | | | | | | | |
| .950 | | | | -.2478 | -.2064 | -.1868 | | | |
| .953 | | | -.2749 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2206 | | | | | | | | |
| 1.000 | | | -.2807 | | -.2598 | | -.3785 | | |

ARC87-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL44) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.000 RN/FT = 2.500
ELV-IB = 8.000 ELV-OB = .000
RUDDER = .000 SPOBRK = .000

ALPHA0( 1) = -6.299 BETA0 ( 1) = .071

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0148 | -.0013 | .2512 | .5755 | .5813 | .5457 | .5553 | -.1624 | |
| .010 | -.0176 | .0192 | .1178 | -.0050 | -.0555 | -.0269 | -.0133 | | |
| .020 | -.0029 | .0238 | .1474 | -.1002 | -.1110 | -.1491 | -.1530 | -.2279 | |
| .040 | | .0173 | .0416 | | | | | | |
| .050 | -.0170 | | | -.1308 | -.1532 | -.1819 | -.1875 | | |
| .069 | | | | | | | | -.2319 | |
| .080 | | | | -.1166 | | | | | |
| .081 | | | -.0426 | | | | | | |
| .086 | | -.0185 | | | | | | | |
| .094 | .0419 | | | | | | | | |
| .150 | | | | -.0597 | -.1707 | -.1510 | -.1865 | | |
| .157 | | | | | | | | -.2306 | |
| .163 | | .0420 | | | | | | | |
| .177 | | | -.0514 | | | | | | |
| .229 | .0090 | | | | | | | | |
| .246 | | .0042 | | | | | | | |
| .250 | | | | -.0452 | -.1499 | -.1714 | -.1610 | | |
| .274 | | | -.0459 | | | | | | |
| .345 | | | | | | | | -.2487 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0813 | | | | | | | |
| .400 | | | | .0098 | -.0823 | | -.1713 | | |
| .402 | | | .0778 | | | | | | |
| .418 | | | | | | | | | -.2388 |
| .497 | -.0884 | | | | | | | | |
| .503 | | | | | | | | -.1792 | |
| .550 | | | | .0332 | .0008 | | | | |
| .565 | | | .0270 | | | | | | |
| .600 | | | | | | | -.1630 | | |
| .637 | | .0523 | | | | | | | |
| .654 | | | | | | -.0754 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0891 | | | | |
| .725 | | | | .1346 | | | | | |
| .730 | | | | | | | | | -.2585 |
| .750 | | | | | | .0009 | -.1673 | | |
| .760 | | | .0579 | | | | | | |
| .775 | | | | .2037 | .1220 | | | | |

ARC97-2.9 !AB! LVAR!ALLHL SEALED! LEFT WING BOT. !RETLHH

ALPHAO( 1) = -6.299 BETAO ( 1) = 0?.

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .798 | | -.0387 | | | | | | | |
| .808 | | | .1741 | | | | | | |
| .834 | -.1541 | | | | | | | | |
| .839 | | -.0173 | | | | | | | |
| .850 | | | | .1256 | .0965 | -.0192 | | | |
| .857 | | | .0592 | | | | | | |
| .862 | | | | | | | | -.2012 | |
| .865 | -.1130 | | | | | | | | |
| .879 | | .0422 | | | | | | | |
| .900 | -.0660 | | | .0312 | | | -.1795 | | |
| .905 | | | -.0527 | | | | | | |
| .919 | | -.0439 | | | | | | | |
| .950 | | | | -.0496 | -.0237 | -.0652 | | | |
| .953 | | | -.0485 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1052 | | | | | | | | |
| 1.000 | | | -.1594 | | -.1039 | | -.1930 | | |

ALP AO( 2) = -4.258 BETAO ( 1) = -4.183

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0099 | .0540 | .3426 | .7498 | .7084 | .6886 | .7271 | -.0560 | |
| .010 | -.0638 | .0829 | .2551 | .1005 | .0181 | .0626 | .1121 | | |
| .020 | -.0806 | .0875 | .2162 | -.0163 | -.0355 | -.0631 | -.0611 | -.1242 | |
| .040 | | .0771 | .0938 | | | | | | |
| .050 | -.0139 | | | -.0674 | -.0755 | -.1004 | -.0991 | | |
| .069 | | | | | | | | -.1331 | |
| .080 | | | | -.0863 | | | | | |
| .081 | | | -.0121 | | | | | | |
| .088 | | .0342 | | | | | | | |
| .094 | .1181 | | | | | | | | |
| .150 | | | | -.0879 | -.0953 | -.06[illegible] | -.0994 | | |
| .157 | | | | | | | | -.1238 | |
| .163 | | .0738 | | | | | | | |
| .177 | | | .0042 | | | | | | |
| .229 | .0738 | | | | | | | | |
| .236 | | .0481 | | | | | | | |
| .250 | | | | -.0375 | -.0949 | -.0867 | -.0893 | | |
| .[illegible] | | | .0181 | | | | | | |
| .345 | | | | | | | | -.1021 | |
| .352 | .0000 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL44)

ALPHAO( 2) = -4.258 BETAO ( 1) = -4.163

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | 2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .390 | | -.0379 | | | | | | | |
| .400 | | | | -.0362 | -.0641 | | -.0919 | | |
| .402 | | | -.0166 | | | | | | |
| .418 | | | | | | | | | -.1283 |
| .497 | -.0474 | | | | | | | | |
| .503 | | | | | | | | -.0896 | |
| .550 | | | | .0925 | -.0265 | | | | |
| .565 | | | .1110 | | | | | | |
| .600 | | | | | | | -.1021 | | |
| .637 | | .1477 | | | | | | | |
| .650 | | | | | | -.0994 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1246 | | | | |
| .725 | | | | .2183 | | | | | |
| .730 | | | | | | | | | -.1463 |
| .750 | | | | | | -.0906 | -.1387 | | |
| .760 | | | .2081 | | | | | | |
| .775 | | | | .2848 | .1992 | | | | |
| .798 | | .0144 | | | | | | | |
| .808 | | | .3114 | | | | | | |
| .834 | -.0885 | | | | | | | | |
| .839 | | .1685 | | | | | | | |
| .850 | | | | .2201 | .1973 | -.0175 | | | |
| .857 | | | .1626 | | | | | | |
| .862 | | | | | | | | -.1509 | |
| .865 | -.0395 | | | | | | | | |
| .879 | | .1117 | | | | | | | |
| .900 | .0301 | | | .1152 | | | -.1679 | | |
| .905 | | | .0155 | | | | | | |
| .919 | | .0299 | | | | | | | |
| .950 | | | | .0252 | .0587 | -.0280 | | | |
| .953 | | | -.0368 | | | | | | |
| .955 | | .0030 | | | | | | | |
| .965 | -.0714 | | | | | | | | |
| 1.000 | | | -.1127 | | -.1348 | | -.1548 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL44)

ALPHA0( 2) = -4.231 BETA0 ( 2) = .037

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0348 | -.0074 | .2181 | .5618 | .6024 | .5628 | .5843 | -.1283 | |
| .010 | -.0520 | .0099 | .0935 | .0343 | -.0401 | .0037 | .0302 | | |
| .020 | -.0323 | .0141 | .0996 | -.0579 | -.0881 | -.1116 | -.1176 | -.1817 | |
| .040 | | .0057 | .0353 | | | | | | |
| .050 | -.0632 | | | -.0923 | -.1264 | -.1425 | -.1535 | | |
| .069 | | | | | | | | -.1870 | |
| .080 | | | | -.1032 | | | | | |
| .081 | | | -.0467 | | | | | | |
| .086 | | -.0282 | | | | | | | |
| .094 | .0462 | | | | | | | | |
| .150 | | | | -.0627 | -.1443 | -.1259 | -.1535 | | |
| .157 | | | | | | | | -.1787 | |
| .163 | | .0274 | | | | | | | |
| .177 | | | -.0363 | | | | | | |
| .229 | .0031 | | | | | | | | |
| .246 | | .0007 | | | | | | | |
| .250 | | | | -.0184 | -.1375 | -.1403 | -.1353 | | |
| .274 | | | -.0386 | | | | | | |
| .345 | | | | | | | | -.1465 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0717 | | | | | | | |
| .400 | | | | .0099 | -.0504 | | -.1458 | | |
| .402 | | | .0840 | | | | | | |
| .418 | | | | | | | | | -.1972 |
| .497 | -.0737 | | | | | | | | |
| .503 | | | | | | | | -.1412 | |
| .550 | | | | .0549 | .0130 | | | | |
| .565 | | | .0453 | | | | | | |
| .600 | | | | | | | -.1521 | | |
| .637 | | .0712 | | | | | | | |
| .650 | | | | | | -.0710 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1218 | | | | |
| .725 | | | | .1562 | | | | | |
| .730 | | | | | | | | | -.2146 |
| .750 | | | | | | .0138 | -.1530 | | |
| .760 | | | .0827 | | | | | | |
| .775 | | | | .2269 | .1537 | | | | |
| .798 | | -.0314 | | | | | | | |
| .808 | | | .1985 | | | | | | |
| .834 | -.1427 | | | | | | | | |
| .839 | | .0030 | | | | | | | |
| .850 | | | | .1378 | .1189 | .0043 | | | |
| .857 | | | .0822 | | | | | | |
| .862 | | | | | | | | -.1755 | |

ARC87-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL44)

ALPHAO( 2) = -4.231 BETAO ( 2) = .037

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.0973 | | | | | | | | |
| .879 | | .0274 | | | | | | | |
| .900 | -.0573 | | | .0358 | | | -.1859 | | |
| .905 | | | -.0833 | | | | | | |
| .919 | | -.0584 | | | | | | | |
| .950 | | | | -.0495 | -.0157 | -.0394 | | | |
| .953 | | | -.0990 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1069 | | | | | | | | |
| 1.000 | | | -.1683 | | -.1271 | | -.1918 | | |

ALPHAO( 2) = -4.258 BETAO ( 3) = 3.599

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0619 | -.0502 | .2059 | .5038 | .4189 | .3871 | .4373 | -.1918 | |
| .010 | -.0583 | -.0470 | .1415 | -.0409 | -.1160 | -.0666 | -.0356 | | |
| .020 | -.0698 | -.0518 | .1140 | -.1210 | -.1539 | -.1578 | -.1562 | -.2340 | |
| .040 | | -.0505 | .0572 | | | | | | |
| .050 | -.0197 | | | -.1248 | -.1750 | -.1829 | -.1889 | | |
| .069 | | | | | | | | -.2343 | |
| .080 | | | | -.1101 | | | | | |
| .081 | | | -.0273 | | | | | | |
| .085 | | .0063 | | | | | | | |
| .094 | -.0429 | | | | | | | | |
| .150 | | | | -.1062 | -.1575 | -.1480 | -.1932 | | |
| .157 | | | | | | | | -.2330 | |
| .163 | | .0868 | | | | | | | |
| .177 | | | -.0338 | | | | | | |
| .229 | -.0423 | | | | | | | | |
| .246 | | -.0374 | | | | | | | |
| .250 | | | | -.0921 | -.1228 | -.1663 | -.1672 | | |
| .274 | | | -.0354 | | | | | | |
| .345 | | | | | | | | -.1883 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0478 | | | | | | | |
| .400 | | | | .0785 | .0249 | | -.1863 | | |
| .402 | | | .1039 | | | | | | |
| .418 | | | | | | | | | -.2414 |
| .497 | -.0315 | | | | | | | | |
| .503 | | | | | | | | -.1830 | |
| .550 | | | | .0749 | .0397 | | | | |

ARC97-019 IABI LVAP(ALLHL SEALED) LEFT WING BOT. (RETL44)

ALPHAO( 2) = -4.258 BETAO ( 3) = 3.599

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .0799 | | | | | | |
| .600 | | | | | | | -.1485 | | |
| .637 | | .0822 | | | | | | | |
| .650 | | | | | | -.0019 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0407 | | | | |
| .725 | | | | .0047 | | | | | |
| .730 | | | | | | | | | -.2457 |
| .750 | | | | | | -.0150 | -.0341 | | |
| .760 | | | -.0825 | | | | | | |
| .775 | | | | .0909 | .1419 | | | | |
| .798 | | -.1370 | | | | | | | |
| .808 | | | -.0549 | | | | | | |
| .834 | -.1679 | | | | | | | | |
| .839 | | -.0873 | | | | | | | |
| .850 | | | | .0191 | .0420 | .0007 | | | |
| .857 | | | -.0889 | | | | | | |
| .862 | | | | | | | | -.1393 | |
| .865 | -.1075 | | | | | | | | |
| .879 | | -.0967 | | | | | | | |
| .900 | -.1259 | | | -.0729 | | | -.0585 | | |
| .905 | | | -.1058 | | | | | | |
| .919 | | -.1460 | | | | | | | |
| .950 | | | | -.1413 | -.1136 | -.0717 | | | |
| .953 | | | -.1547 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1239 | | | | | | | | |
| 1.000 | | | -.1897 | | -.1639 | | -.1334 | | |

ALPHAO( 3) = -2.161 BETAO ( 1) = .037

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0545 | -.0197 | .1891 | .8359 | .6000 | .5971 | .8120 | -.0685 | |
| .010 | -.0680 | .0131 | .1131 | .0736 | -.0083 | .0373 | .0712 | | |
| .020 | -.0414 | -.0015 | .1420 | -.0351 | -.0523 | -.0706 | -.0823 | -.1267 | |
| .040 | | -.0084 | .0725 | | | | | | |
| .050 | -.0795 | | | -.0841 | -.0889 | -.1088 | -.1187 | | |
| .069 | | | | | | | | -.1382 | |
| .080 | | | | -.0968 | | | | | |
| .081 | | | -.0356 | | | | | | |
| .086 | | -.0307 | | | | | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL44)

ALPHA0( 3) = -2.161 BETA0 ( 1) = .037

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | .0239 | | | | | | | | |
| .150 | | | | -.0899 | -.1119 | -.0994 | -.1204 | | |
| .157 | | | | | | | | -.1323 | |
| .163 | | .0202 | | | | | | | |
| .177 | | | -.0187 | | | | | | |
| .229 | -.0106 | | | | | | | | |
| .246 | | .0082 | | | | | | | |
| .250 | | | | -.0001 | -.1219 | -.1115 | -.1079 | | |
| .274 | | | -.0255 | | | | | | |
| .345 | | | | | | | | -.1145 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0391 | | | | | | | |
| .400 | | | | .0223 | -.0314 | | -.1175 | | |
| .402 | | | .0780 | | | | | | |
| .418 | | | | | | | | | -.1415 |
| .497 | -.0326 | | | | | | | | |
| .503 | | | | | | | | -.1165 | |
| .550 | | | | .0896 | .0216 | | | | |
| .565 | | | .0637 | | | | | | |
| .600 | | | | | | | -.1298 | | |
| .637 | | .0850 | | | | | | | |
| .650 | | | | | | -.0446 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1555 | | | | |
| .725 | | | | .1935 | | | | | |
| .730 | | | | | | | | | -.1845 |
| .750 | | | | | | .0889 | -.1267 | | |
| .760 | | | .1196 | | | | | | |
| .775 | | | | .2659 | .2181 | | | | |
| .798 | | -.0138 | | | | | | | |
| .809 | | | .1997 | | | | | | |
| .834 | -.1369 | | | | | | | | |
| .839 | | .0283 | | | | | | | |
| .850 | | | | .1650 | .1490 | .0394 | | | |
| .857 | | | .0621 | | | | | | |
| .862 | | | | | | | | -.1438 | |
| .865 | -.0877 | | | | | | | | |
| .879 | | .0173 | | | | | | | |
| .900 | -.0498 | | | .0526 | | | -.1526 | | |
| .905 | | | -.0580 | | | | | | |
| .919 | | -.0553 | | | | | | | |
| .950 | | | | -.0418 | -.0128 | -.0131 | | | |
| .953 | | | -.0933 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1083 | | | | | | | | |

ARC97-019 IA81 LVAP(ALUM SEALED) LEFT WING BOT. (RETL44)

ALPHAO( 3) = -2.161 BETAO ( 1) = .037

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1703 | | -.1499 | | -.1941 | | |

ALPHAO( 4) = -.093 BETAO ( 1) = -8.250

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0144 | .0882 | .4207 | .8733 | .8094 | .8083 | .8194 | .0744 | |
| .010 | -.0324 | .0678 | .2942 | .2049 | .1218 | .1650 | .2514 | | |
| .020 | -.0563 | .0431 | .2247 | .0707 | .0786 | .0563 | .0494 | .0298 | |
| .040 | | .1060 | .2004 | | | | | | |
| .050 | .0439 | | | .0150 | .0414 | .0146 | .0141 | | |
| .089 | | | | | | | | .0058 | |
| .080 | | | | -.0020 | | | | | |
| .081 | | | .0742 | | | | | | |
| .086 | | .0811 | | | | | | | |
| .094 | .1074 | | | | | | | | |
| .150 | | | | -.0219 | .0011 | .0196 | .0147 | | |
| .157 | | | | | | | | .0025 | |
| .163 | | .1692 | | | | | | | |
| .177 | | | .0761 | | | | | | |
| .229 | .1041 | | | | | | | | |
| .246 | | .1418 | | | | | | | |
| .250 | | | | .0332 | -.0119 | .0082 | .0150 | | |
| .274 | | | .0101 | | | | | | |
| .345 | | | | | | | | .0150 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0377 | | | | | | | |
| .400 | | | | .0322 | .0175 | | .0101 | | |
| .402 | | | -.0200 | | | | | | |
| .418 | | | | | | | | | .0052 |
| .497 | .0036 | | | | | | | | |
| .503 | | | | | | | | .0039 | |
| .550 | | | | .1408 | .0409 | | | | |
| 565 | | | .1928 | | | | | | |
| .600 | | | | | | | -.0142 | | |
| .637 | | .2004 | | | | | | | |
| .650 | | | | | | -.0079 | | | |
| .870 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0250 | | | | |
| .725 | | | | .3447 | | | | | |
| .730 | | | | | | | | | -.0384 |
| .750 | | | | | | -.0334 | -.0529 | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL44)

ALPHAO( 4) = -.093 BETAO ( 1) = -6.250

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .3899 | | | | | | |
| .775 | | | | .4172 | .3019 | | | | |
| .798 | | .3285 | | | | | | | |
| .808 | | | .4283 | | | | | | |
| .834 | -.0425 | | | | | | | | |
| .839 | | .2875 | | | | | | | |
| .850 | | | | .3466 | .3182 | .0062 | | | |
| .857 | | | .2512 | | | | | | |
| .862 | | | | | | | | -.0997 | |
| .865 | .0914 | | | | | | | | |
| .879 | | .2422 | | | | | | | |
| .900 | .0927 | | | .2064 | | | -.1218 | | |
| .905 | | | .0794 | | | | | | |
| .919 | | .0623 | | | | | | | |
| .950 | | | | .0882 | .1176 | .0396 | | | |
| .953 | | | .0214 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0984 | | | | | | | | |
| 1.000 | | | -.1096 | | -.1918 | | -.1471 | | |

ALPHAO( 4) = -.091 BETAO ( 2) = -4.198

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0319 | .0499 | .3561 | .7948 | .7509 | .7364 | .7487 | .0481 | |
| .010 | -.0679 | .0447 | .2852 | .1674 | .0879 | .1254 | .2020 | | |
| .020 | -.0705 | .0725 | .2699 | .0409 | .0453 | .0195 | .0155 | .0058 | |
| .040 | | .0800 | .1271 | | | | | | |
| .050 | -.0257 | | | -.0158 | .0072 | -.0200 | -.0199 | | |
| .069 | | | | | | | | -.0155 | |
| .080 | | | | -.0318 | | | | | |
| .081 | | | .0247 | | | | | | |
| .086 | | .0427 | | | | | | | |
| .094 | .0663 | | | | | | | | |
| .150 | | | | -.0488 | -.0303 | -.0110 | -.0182 | | |
| .157 | | | | | | | | -.0181 | |
| .163 | | .0858 | | | | | | | |
| .177 | | | .0286 | | | | | | |
| .229 | .0581 | | | | | | | | |
| .248 | | .0770 | | | | | | | |
| .250 | | | | -.0027 | -.0303 | -.0189 | -.0098 | | |
| .274 | | | .0072 | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL44)

ALPHAO( 4) = -.091 BETAO ( 2) = -4.198

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | | |
| .362 | .0000 | | | | | | | -.0047 | |
| .390 | | -.0134 | | | | | | | |
| .400 | | | | -.0014 | -.0187 | | -.0096 | | |
| .402 | | | -.0414 | | | | | | |
| .418 | | | | | | | | | |
| .497 | -.0401 | | | | | | | | -.0184 |
| .503 | | | | | | | | -.0159 | |
| .550 | | | | .1334 | .0054 | | | | |
| .565 | | | .1588 | | | | | | |
| .600 | | | | | | | -.0328 | | |
| .637 | | .1625 | | | | | | | |
| .650 | | | | | | -.0375 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2060 | | | | |
| .725 | | | | .2974 | | | | | |
| .730 | | | | | | | | | -.0640 |
| .750 | | | | | | -.0323 | -.0776 | | |
| .760 | | | .3374 | | | | | | |
| .775 | | | | .3661 | .2666 | | | | |
| .798 | | .2424 | | | | | | | |
| .808 | | | .3826 | | | | | | |
| .834 | -.0718 | | | | | | | | |
| .839 | | .2279 | | | | | | | |
| .850 | | | | .2874 | .2592 | .0063 | | | |
| .857 | | | .2103 | | | | | | |
| .862 | | | | | | | | -.1161 | |
| .865 | -.0175 | | | | | | | | |
| .879 | | .1210 | | | | | | | |
| .900 | .0522 | | | .1654 | | | -.1202 | | |
| .905 | | | .0409 | | | | | | |
| .919 | | .0586 | | | | | | | |
| .950 | | | | .0582 | .0879 | .0597 | | | |
| .953 | | | -.0313 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0915 | | | | | | | | |
| 1.000 | | | -.1395 | | -.1894 | | -.1524 | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL44)

ALPHAO( 4) = -.090 BETAO ( 3) = -2.083

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/Cw | | | | | | | | | |
| .000 | -.0567 | .0009 | .3083 | .7201 | .8756 | .8330 | .8974 | .0052 | |
| .010 | -.0730 | .0055 | .2425 | .1315 | .0533 | .0973 | .1703 | | |
| .020 | -.0405 | .0385 | .1981 | .0150 | .0149 | -.0035 | -.0092 | -.0299 | |
| .040 | | .0488 | .0828 | | | | | | |
| .050 | -.0556 | | | -.0382 | -.0252 | -.0410 | -.0419 | | |
| .069 | | | | | | | | -.0473 | |
| .080 | | | | -.0568 | | | | | |
| .081 | | | -.0151 | | | | | | |
| .086 | | .0148 | | | | | | | |
| .094 | .0191 | | | | | | | | |
| .150 | | | | -.0782 | -.0569 | -.0351 | -.0439 | | |
| .157 | | | | | | | | -.0487 | |
| .163 | | .0483 | | | | | | | |
| .177 | | | -.0019 | | | | | | |
| .229 | .0374 | | | | | | | | |
| .246 | | .0471 | | | | | | | |
| .250 | | | | -.0360 | -.0644 | -.0445 | -.0414 | | |
| .274 | | | .0130 | | | | | | |
| .345 | | | | | | | | -.0365 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0435 | | | | | | | |
| .400 | | | | -.0292 | -.0493 | | -.0431 | | |
| .402 | | | .0829 | | | | | | |
| .418 | | | | | | | | | -.0477 |
| .497 | -.0527 | | | | | | | | |
| .503 | | | | | | | | -.0431 | |
| .550 | | | | .1113 | .0081 | | | | |
| .565 | | | .1104 | | | | | | |
| .600 | | | | | | | -.0585 | | |
| .637 | | .1134 | | | | | | | |
| .650 | | | | | | -.0606 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1906 | | | | |
| .725 | | | | .2625 | | | | | |
| .730 | | | | | | | | | -.0894 |
| .750 | | | | | | -.0238 | -.1002 | | |
| .760 | | | .2473 | | | | | | |
| .775 | | | | .3207 | .2451 | | | | |
| .798 | | .0571 | | | | | | | |
| .808 | | | .2955 | | | | | | |
| .834 | -.0753 | | | | | | | | |
| .839 | | .1888 | | | | | | | |
| .850 | | | | .2448 | .2246 | .0748 | | | |
| .857 | | | .1716 | | | | | | |
| .862 | | | | | | | | -.1298 | |

ARC97-019 1A81 LVAP:ALLHL SEALED) LEFT WING BOT. (RETL44)

ALPHAO( 4) = -.090 BETAO ( 3) = -2.083

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .885 | -.0232 | | | | | | | | |
| .879 | | .1293 | | | | | | | |
| .900 | -.0114 | | | .1287 | | | -.1215 | | |
| .905 | | | .0334 | | | | | | |
| .919 | | .0245 | | | | | | | |
| .950 | | | | .0272 | .0604 | .0434 | | | |
| .953 | | | -.0248 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0885 | | | | | | | | |
| 1.000 | | | -.1465 | | -.1792 | | -.1684 | | |

ALPHAO( 4) = -.077 BETAO ( 4) = .009

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0692 | -.0361 | .2183 | 6528 | .6372 | .6168 | .6369 | -.0278 | |
| .010 | -.0441 | -.0177 | .1626 | .1031 | .0305 | .0674 | .1285 | | |
| .020 | -.0425 | .0024 | .1267 | -.0063 | -.0099 | -.0269 | -.0340 | -.0586 | |
| .040 | | -.0008 | .1151 | | | | | | |
| .050 | -.0974 | | | -.0569 | -.0438 | -.0611 | -.0681 | | |
| .069 | | | | | | | | -.0780 | |
| .080 | | | | -.0764 | | | | | |
| .081 | | | -.0247 | | | | | | |
| .086 | | -.0313 | | | | | | | |
| .094 | -.0062 | | | | | | | | |
| .150 | | | | -.0870 | -.0809 | -.0592 | -.0677 | | |
| .157 | | | | | | | | -.0737 | |
| .163 | | .0429 | | | | | | | |
| .177 | | | -.0104 | | | | | | |
| .229 | .0006 | | | | | | | | |
| .246 | | .0313 | | | | | | | |
| .250 | | | | -.0083 | -.0908 | -.0730 | -.0606 | | |
| .274 | | | -.0107 | | | | | | |
| .345 | | | | | | | | -.0576 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0150 | | | | | | | |
| .400 | | | | .0628 | -.0169 | | -.0870 | | |
| .402 | | | .1184 | | | | | | |
| .418 | | | | | | | | | -.0756 |
| .497 | .0184 | | | | | | | | |
| .503 | | | | | | | | -.0858 | |
| .550 | | | | .1099 | .0651 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL44)

ALPHA0( 4) = -.077 BETA0 ( 4) = .009

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .585 | | | .0779 | | | | | | |
| .600 | | | | | | | -.0825 | | |
| .637 | | .0931 | | | | | | | |
| .650 | | | | | | -.0069 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2004 | | | | |
| .725 | | | | .2475 | | | | | |
| .730 | | | | | | | | | -.1108 |
| .750 | | | | | | .1171 | -.0878 | | |
| .760 | | | .1652 | | | | | | |
| .775 | | | | .3025 | .2680 | | | | |
| .798 | | .0974 | | | | | | | |
| .808 | | | .2474 | | | | | | |
| .834 | -.1294 | | | | | | | | |
| .839 | | .0601 | | | | | | | |
| .850 | | | | .1994 | .2071 | .1082 | | | |
| .857 | | | .1073 | | | | | | |
| .862 | | | | | | | | -.1329 | |
| .865 | -.0614 | | | | | | | | |
| .879 | | .0656 | | | | | | | |
| .900 | -.0595 | | | .0896 | | | -.1186 | | |
| .905 | | | -.0240 | | | | | | |
| .919 | | -.0327 | | | | | | | |
| .950 | | | | -.0073 | .0257 | .0376 | | | |
| .952 | | | -.0696 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1000 | | | | | | | | |
| 1.000 | | | -.1654 | | -.1608 | | -.1851 | | |

ALPHA0( 4) = -.067 BETA0 ( 5) = 2.124

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0970 | -.0635 | .2050 | .5840 | .5437 | .5523 | .5676 | -.0547 | |
| .010 | -.0946 | -.0441 | .1937 | .0706 | -.0054 | .0386 | .0872 | | |
| .020 | -.0844 | -.0489 | .1701 | -.0270 | -.0380 | -.0546 | -.0592 | -.0798 | |
| .040 | | -.0502 | .0714 | | | | | | |
| .050 | -.1017 | | | -.0334 | -.0625 | -.0895 | -.0912 | | |
| .069 | | | | | | | | -.0907 | |
| .080 | | | | -.0280 | | | | | |
| .081 | | | .0310 | | | | | | |
| .086 | | -.0311 | | | | | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL44)

ALPHA0( 4) = -.087 BETA0 ( 5) = 2.124

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0302 | | | | | | | | |
| .150 | | | | -.0878 | -.0651 | -.0706 | -.0887 | | |
| .157 | | | | | | | | -.0881 | |
| .163 | | .0777 | | | | | | | |
| .177 | | | -.0017 | | | | | | |
| .229 | -.0492 | | | | | | | | |
| .246 | | .0095 | | | | | | | |
| .250 | | | | -.0283 | -.0599 | - 0687 | -.0737 | | |
| .274 | | | -.0392 | | | | | | |
| .345 | | | | | | | | -.0658 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0180 | | | | | | | |
| .400 | | | | .1112 | -.0280 | | -.0671 | | |
| .402 | | | .1274 | | | | | | |
| .418 | | | | | | | | | -.0878 |
| .497 | -.0018 | | | | | | | | |
| .503 | | | | | | | | -.0707 | |
| .550 | | | | .1698 | .1267 | | | | |
| .565 | | | .1529 | | | | | | |
| .600 | | | | | | | -.0419 | | |
| .637 | | .1347 | | | | | | | |
| .650 | | | | | | .1270 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2184 | | | | |
| .725 | | | | .2187 | | | | | |
| .730 | | | | | | | | | -.1161 |
| .750 | | | | | | .1499 | -.0445 | | |
| .760 | | | .0915 | | | | | | |
| .775 | | | | .2779 | .3061 | | | | |
| .798 | | -.0478 | | | | | | | |
| .808 | | | .1241 | | | | | | |
| .834 | -.1738 | | | | | | | | |
| .839 | | -.0138 | | | | | | | |
| .850 | | | | .1241 | .1671 | .0944 | | | |
| .857 | | | -.0004 | | | | | | |
| .862 | | | | | | | | -.0952 | |
| .865 | -.1380 | | | | | | | | |
| .879 | | -.0575 | | | | | | | |
| .900 | -.0880 | | | .0127 | | | .0705 | | |
| .905 | | | -.1028 | | | | | | |
| .919 | | -.1057 | | | | | | | |
| .950 | | | | -.0751 | -.0427 | .0150 | | | |
| .953 | | | -.1483 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1257 | | | | | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL44)

ALPHAC ( 4) = -.067 BETAO ( 5) = 2.124

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1874 | | -.1689 | | -.1602 | | |

ALPHAO( 4) = -.050 BETAO ( 6) = 3.572

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1089 | -.0674 | .1551 | .5212 | .4791 | .4785 | .5218 | -.0727 | |
| .010 | -.1068 | -.0680 | .1566 | .0560 | -.0281 | .0037 | .0671 | | |
| .020 | -.1081 | -.0671 | .1397 | -.0270 | -.0572 | -.0831 | -.0711 | -.0901 | |
| .040 | | -.0651 | .0754 | | | | | | |
| .050 | -.1222 | | | -.0436 | -.0798 | -.1087 | -.0999 | | |
| .069 | | | | | | | | -.0980 | |
| .080 | | | | -.0673 | | | | | |
| .081 | | | -.0174 | | | | | | |
| .086 | | -.0075 | | | | | | | |
| .094 | -.0689 | | | | | | | | |
| .150 | | | | -.0721 | -.0808 | -.0728 | -.0908 | | |
| .157 | | | | | | | | -.0872 | |
| .163 | | .0588 | | | | | | | |
| .177 | | | -.0420 | | | | | | |
| .229 | -.0421 | | | | | | | | |
| .246 | | -.0203 | | | | | | | |
| .250 | | | | -.0510 | -.0727 | -.0682 | -.0724 | | |
| .274 | | | .0098 | | | | | | |
| .345 | | | | | | | | -.0599 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0454 | | | | | | | |
| .400 | | | | .1613 | .1286 | | -.0389 | | |
| .402 | | | .1581 | | | | | | |
| .418 | | | | | | | | | -.0799 |
| .497 | -.0242 | | | | | | | | |
| .503 | | | | | | | | -.0590 | |
| .550 | | | | .1847 | .1844 | | | | |
| .565 | | | .1711 | | | | | | |
| .600 | | | | | | | .0303 | | |
| .637 | | .1470 | | | | | | | |
| .650 | | | | | | .1286 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2372 | | | | |
| .725 | | | | .1431 | | | | | |
| .730 | | | | | | | | | -.1234 |
| .750 | | | | | | .1888 | .0946 | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RSTL44)

ALPHAO( 4) = -.050 BETAO ( 6) = 3.572

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | -.0355 | | | | | | |
| .775 | | | | 1940 | .2696 | | | | |
| .798 | | -.1060 | | | | | | | |
| .808 | | | .0482 | | | | | | |
| .834 | -.1624 | | | | | | | | |
| .839 | | -.0310 | | | | | | | |
| .850 | | | | .0345 | .0841 | .0982 | | | |
| .857 | | | -.0352 | | | | | | |
| .862 | | | | | | | | -.0302 | |
| .865 | -.1032 | | | | | | | | |
| .879 | | -.0494 | | | | | | | |
| .900 | -.1045 | | | -.0553 | | | .0546 | | |
| .905 | | | -.1076 | | | | | | |
| .919 | | -.1323 | | | | | | | |
| .950 | | | | -.1260 | -.1039 | -.0231 | | | |
| .953 | | | -.1610 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1840 | | | | | | | | |
| 1.000 | | | -.1988 | | -.1881 | | -.1813 | | |

ALPHAO( 4) = -.053 BETAO ( 7) = 8.278

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1040 | -.1145 | .0984 | .4582 | .4505 | .4339 | .4523 | -.0217 | |
| .010 | -.1083 | -.1129 | .1310 | .0225 | -.0570 | -.0131 | .0317 | | |
| .020 | -.1204 | -.0921 | .1191 | -.0955 | -.0922 | -.0857 | -.0939 | -.0411 | |
| .040 | | -.0818 | .0379 | | | | | | |
| .050 | -.1489 | | | -.0775 | -.1155 | -.1185 | -.1210 | | |
| .068 | | | | | | | | - 0518 | |
| .080 | | | | -.0988 | | | | | |
| .081 | | | -.0520 | | | | | | |
| .088 | | -.0827 | | | | | | | |
| .094 | -.1088 | | | | | | | | |
| .150 | | | | -.0748 | -.1084 | -.0820 | -.1004 | | |
| .157 | | | | | | | | -.0414 | |
| .183 | | .0078 | | | | | | | |
| .177 | | | -.0387 | | | | | | |
| .220 | -.0757 | | | | | | | | |
| .248 | | -.0232 | | | | | | | |
| .250 | | | | .0478 | -.0267 | -.0743 | -.0498 | | |
| .274 | | | .0744 | | | | | | |

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ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL44)

ALPHA( 4) = -.053 BETA0 ( 7) = 6.276

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .8730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .0130 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0993 | | | | | | | |
| .400 | | | | .1654 | .1915 | | -.0195 | | |
| .402 | | | .1666 | | | | | | |
| .418 | | | | | | | | | -.0249 |
| .497 | .0149 | | | | | | | | |
| .503 | | | | | | | | .1198 | |
| .550 | | | | .1769 | .1835 | | | | |
| .555 | | | .1501 | | | | | | |
| .600 | | | | | | | .2354 | | |
| .637 | | .0997 | | | | | | | |
| .650 | | | | | | .1403 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1796 | | | | |
| .725 | | | | .0353 | | | | | |
| .730 | | | | | | | | | -.0626 |
| .750 | | | | | | .1360 | .2295 | | |
| .760 | | | -.0769 | | | | | | |
| .775 | | | | .1095 | .1982 | | | | |
| .798 | | -.1037 | | | | | | | |
| .809 | | | .0140 | | | | | | |
| .834 | -.1087 | | | | | | | | |
| .839 | | -.0358 | | | | | | | |
| .850 | | | | -.0147 | .0196 | .0320 | | | |
| .857 | | | -.0407 | | | | | | |
| .862 | | | | | | | | .0435 | |
| .865 | -.0773 | | | | | | | | |
| .879 | | -.0950 | | | | | | | |
| .900 | -.1168 | | | -.0819 | | | .0824 | | |
| .905 | | | -.1319 | | | | | | |
| .919 | | -.1503 | | | | | | | |
| .950 | | | | -.1407 | -.1412 | -.0537 | | | |
| .953 | | | -.1771 | | | | | | |
| .965 | | .0000 | | | | | | | |
| .966 | -.0983 | | | | | | | | |
| 1.000 | | | -.1923 | | -.1853 | | -.1423 | | |

ARC97-019 IA8I LVAP(ALLHL SEALED) LEFT WING BOT. (RETL44)

ALPHAO( 5) = 1.987 BETAO ( 1) = .023

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2890 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0347 | -.0420 | .2584 | .8715 | .6571 | .6427 | .6636 | .0372 | |
| .0.0 | -.0054 | -.0235 | .2163 | .1385 | .0742 | .1196 | .2018 | | |
| .020 | -.0077 | .0241 | .2195 | .0320 | .0486 | .0334 | .0278 | .0228 | |
| .040 | | .0199 | .0875 | | | | | | |
| .050 | -.0054 | | | -.0256 | .0056 | -.0019 | .0009 | | |
| .059 | | | | | | | | | |
| .080 | | | | -.0480 | | | | .0018 | |
| .081 | | | -.0184 | | | | | | |
| .086 | | -.0196 | | | | | | | |
| .094 | -.0567 | | | | | | | | |
| .150 | | | | -.0390 | -.0377 | -.0066 | .0000 | | |
| .157 | | | | | | | | | |
| .163 | | .0494 | | | | | | .0002 | |
| .177 | | | -.0171 | | | | | | |
| .229 | .0083 | | | | | | | | |
| .246 | | .0312 | | | | | | | |
| .250 | | | | -.0131 | -.0357 | -.0170 | .0038 | | |
| .274 | | | .0098 | | | | | | |
| .345 | | | | | | | | | |
| .362 | .0000 | | | | | | | .0038 | |
| .395 | | -.0009 | | | | | | | |
| .400 | | | | .1094 | .0122 | | -.0028 | | |
| .402 | | | .1545 | | | | | | |
| .418 | | | | | | | | | |
| .497 | .0309 | | | | | | | | -.0277 |
| .503 | | | | | | | | | |
| .550 | | | | .1306 | .1074 | | | -.0119 | |
| .565 | | | .1393 | | | | | | |
| .600 | | | | | | | -.0237 | | |
| .637 | | .1338 | | | | | | | |
| .650 | | | | | | .0294 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2848 | | | | |
| .725 | | | | .3379 | | | | | |
| .730 | | | | | | | | | |
| .750 | | | | | | | | | -.1142 |
| .760 | | | .2360 | | | .1893 | -.0424 | | |
| .775 | | | | .3791 | .3537 | | | | |
| .798 | | .0380 | | | | | | | |
| .808 | | | .2762 | | | | | | |
| .834 | -.1208 | | | | | | | | |
| .839 | | .0995 | | | | | | | |
| .850 | | | | .2374 | .2574 | .1887 | | | |
| .857 | | | .1208 | | | | | | |
| .862 | | | | | | | | -.1103 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL44)

ALPHAO( 5) = 1.987 BETAO ( 1) = .023

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .885 | -.0531 | | | | | | | | |
| .879 | | .0499 | | | | | | | |
| .900 | -.0414 | | | .1097 | | | -.0742 | | |
| .905 | | | -.0222 | | | | | | |
| .919 | | -.0251 | | | | | | | |
| .950 | | | | .0011 | .0424 | .0745 | | | |
| .953 | | | -.0889 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1018 | | | | | | | | |
| 1.000 | | | -.1769 | | -.1685 | | -.1895 | | |

ALPHAO( 6) = 3.466 BETAO ( 1) = -4.234

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0447 | .0301 | .3884 | .8187 | .7888 | .7891 | .7944 | .1602 | |
| .010 | .0627 | .0434 | .3620 | .2414 | .1806 | .2740 | .3500 | | |
| .020 | .0499 | .0917 | .3102 | .1236 | .1971 | .1887 | .1677 | .1553 | |
| .040 | | .1034 | .1587 | | | | | | |
| .050 | .0925 | | | .0660 | .1170 | .1265 | .1409 | | |
| .069 | | | | | | | | .1284 | |
| .080 | | | | .0369 | | | | | |
| .081 | | | .0530 | | | | | | |
| .086 | | .0619 | | | | | | | |
| .094 | .0067 | | | | | | | | |
| .150 | | | | .0097 | .0644 | .1006 | .1291 | | |
| .157 | | | | | | | | .1183 | |
| .163 | | .1178 | | | | | | | |
| .177 | | | .0555 | | | | | | |
| .229 | .0467 | | | | | | | | |
| .246 | | .0784 | | | | | | | |
| .250 | | | | .0471 | .0568 | .0882 | .1183 | | |
| .274 | | | -.0053 | | | | | | |
| .345 | | | | | | | | .1015 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0247 | | | | | | | |
| .400 | | | | .0545 | .0549 | | .0983 | | |
| .402 | | | -.0001 | | | | | | |
| .418 | | | | | | | | | .0247 |
| .497 | -.0155 | | | | | | | | |
| .503 | | | | | | | | .0750 | |
| .550 | | | | .2709 | .0594 | | | | |

ARC97-019 !A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL44)

ALPHAO( 6) = 3.488 BETAO ( 1) = -4.234

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .2396 | | | | | | |
| .600 | | | | | | | .0598 | | |
| .637 | | .2778 | | | | | | | |
| .650 | | | | | | .0538 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3375 | | | | |
| .725 | | | | .4236 | | | | | |
| .730 | | | | | | | | | -.1375 |
| .750 | | | | | | .2145 | -.0067 | | |
| .760 | | | .3454 | | | | | | |
| .775 | | | | .4961 | .4304 | | | | |
| .798 | | .2130 | | | | | | | |
| .808 | | | .4241 | | | | | | |
| .834 | -.0299 | | | | | | | | |
| .839 | | .1927 | | | | | | | |
| .850 | | | | .3309 | .3163 | .2030 | | | |
| .857 | | | .2076 | | | | | | |
| .862 | | | | | | | | -.0811 | |
| .865 | .0480 | | | | | | | | |
| .879 | | .0881 | | | | | | | |
| .900 | -.0060 | | | .1822 | | | -.0437 | | |
| .905 | | | .0297 | | | | | | |
| .919 | | -.0459 | | | | | | | |
| .950 | | | | .0573 | .0966 | .1232 | | | |
| .953 | | | -.0489 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1080 | | | | | | | | |
| 1.000 | | | -.1715 | | -.2200 | | -.1677 | | |

ALPHAO( 6) = 3.479 BETAO ( 2) = .019

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0168 | -.0418 | .2871 | .6826 | .6862 | .6843 | .6976 | .0971 | |
| .010 | -.0090 | .0120 | .2774 | .1889 | .1416 | .2272 | .2914 | | |
| .020 | -.0230 | .0184 | .2373 | .0801 | .1604 | .1505 | .1271 | .0997 | |
| .040 | | .0123 | .1038 | | | | | | |
| .050 | .0175 | | | .0234 | .0731 | .0878 | .1006 | | |
| .069 | | | | | | | | .0797 | |
| .080 | | | | .0010 | | | | | |
| .081 | | | .0078 | | | | | | |
| .086 | | -.0075 | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SCALED) LEFT WING BOT. (RETL44)

ALPHAO( 6) = 3.479 BETAO ( 2) = .019

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0581 | | | | | | | | |
| .150 | | | | .0272 | .0310 | .0849 | .0908 | | |
| .157 | | | | | | | | .0705 | |
| .163 | | .0612 | | | | | | | |
| .177 | | | .0258 | | | | | | |
| .229 | .0071 | | | | | | | | |
| .248 | | .0425 | | | | | | | |
| .250 | | | | .0682 | .0508 | .0558 | .0800 | | |
| .274 | | | .0221 | | | | | | |
| .345 | | | | | | | | .0577 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0460 | | | | | | | |
| .400 | | | | .1863 | .0697 | | .0593 | | |
| .402 | | | .2260 | | | | | | |
| .418 | | | | | | | | | -.0338 |
| .497 | .0460 | | | | | | | | |
| .503 | | | | | | | | .0357 | |
| .550 | | | | .2856 | .2650 | | | | |
| .565 | | | .2616 | | | | | | |
| .600 | | | | | | | .0547 | | |
| .637 | | .2399 | | | | | | | |
| .650 | | | | | | .2495 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3980 | | | | |
| .725 | | | | .3351 | | | | | |
| .730 | | | | | | | | | -.1861 |
| .750 | | | | | | .3265 | .0577 | | |
| .760 | | | .1930 | | | | | | |
| .775 | | | | .4037 | .4447 | | | | |
| .798 | | .0943 | | | | | | | |
| .808 | | | .2311 | | | | | | |
| .834 | -.0973 | | | | | | | | |
| .839 | | .0677 | | | | | | | |
| .850 | | | | .2241 | .2487 | .2220 | | | |
| .857 | | | .0832 | | | | | | |
| .862 | | | | | | | | -.0458 | |
| .865 | -.0315 | | | | | | | | |
| .879 | | -.0148 | | | | | | | |
| .900 | -.0813 | | | .0931 | | | .2188 | | |
| .905 | | | -.0443 | | | | | | |
| .919 | | -.0973 | | | | | | | |
| .950 | | | | -.0148 | .0284 | .0886 | | | |
| .953 | | | -.1093 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1157 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL44)

ALPHAO( 6) = 3.479 BETAO ( 2) = .019

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1909 | | -.1953 | | -.1835 | | |

ALPHAO( 6) = 3.485 BETAO ( 3) = 3.581

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1270 | -.1008 | .1758 | .5773 | .5848 | .5813 | .5951 | .0574 | |
| .010 | -.1054 | -.0759 | .2240 | .1754 | .1765 | .2189 | .2593 | | |
| .020 | -.0959 | -.0341 | .2052 | .1194 | .1820 | .1490 | .1201 | .0741 | |
| .040 | | -.0169 | .1184 | | | | | | |
| .050 | -.1298 | | | .0495 | .0669 | .0858 | .0939 | | |
| .069 | | | | | | | | .0638 | |
| .080 | | | | .0182 | | | | | |
| .081 | | | .0345 | | | | | | |
| .086 | | .0101 | | | | | | | |
| .094 | -.0893 | | | | | | | | |
| .150 | | | | .0258 | .0449 | .0687 | .0930 | | |
| .157 | | | | | | | | .0682 | |
| .163 | | .0753 | | | | | | | |
| .177 | | | .0254 | | | | | | |
| .229 | -.0094 | | | | | | | | |
| .246 | | .0386 | | | | | | | |
| .250 | | | | .1527 | .0998 | .0903 | .0961 | | |
| .274 | | | .1485 | | | | | | |
| .345 | | | | | | | | .0790 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1819 | | | | | | | |
| .400 | | | | .2778 | .2769 | | .1338 | | |
| .402 | | | .2567 | | | | | | |
| .418 | | | | | | | | | -.0981 |
| .497 | .1293 | | | | | | | | |
| .503 | | | | | | | | .1174 | |
| .550 | | | | .2302 | .2429 | | | | |
| .565 | | | .2191 | | | | | | |
| .600 | | | | | | | .2129 | | |
| .637 | | .2049 | | | | | | | |
| .650 | | | | | | .2161 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2846 | | | | |
| .725 | | | | .1898 | | | | | |
| .730 | | | | | | | | | -.2783 |
| .750 | | | | | | .2121 | .1791 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL44)

ALPHAO( 6) = 3.485 BETAO ( 3) = 3.581

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .0105 | | | | | | |
| .775 | | | | .2305 | .3246 | | | | |
| .798 | | -.0439 | | | | | | | |
| .808 | | | .0565 | | | | | | |
| .834 | -.1420 | | | | | | | | |
| .839 | | -.0339 | | | | | | | |
| .850 | | | | .0653 | .1140 | .1123 | | | |
| .857 | | | -.0491 | | | | | | |
| .862 | | | | | | | | .0643 | |
| .865 | -.0821 | | | | | | | | |
| .879 | | -.0569 | | | | | | | |
| .900 | -.0919 | | | -.0382 | | | .0981 | | |
| .905 | | | -.1238 | | | | | | |
| .919 | | -.1281 | | | | | | | |
| .950 | | | | -.1132 | -.0825 | -.0059 | | | |
| .953 | | | -.1560 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1238 | | | | | | | | |
| 1.000 | | | -.2095 | | -.1739 | | -.1852 | | |

ALPHAO( 7) = 6.167 BETAO ( 1) = .048

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0463 | -.0404 | .2984 | .7187 | .7286 | .7378 | .7222 | .1304 | |
| .010 | -.0399 | .0112 | .3086 | .2377 | .2749 | .3455 | .3885 | | |
| .020 | -.0288 | .0206 | .2654 | .1370 | .2839 | .2589 | .2423 | .1623 | |
| .040 | | .0199 | .1328 | | | | | | |
| .050 | .0242 | | | .1030 | .1453 | .1713 | .2007 | | |
| .069 | | | | | | | | .1462 | |
| .080 | | | | .0937 | | | | | |
| .081 | | | .1198 | | | | | | |
| .086 | | .0308 | | | | | | | |
| .094 | -.0647 | | | | | | | | |
| .150 | | | | .1138 | .1330 | .1545 | .1873 | | |
| .157 | | | | | | | | .1353 | |
| .163 | | .0890 | | | | | | | |
| .177 | | | .0884 | | | | | | |
| .229 | .0089 | | | | | | | | |
| .248 | | .0727 | | | | | | | |
| .250 | | | | .0853 | .1308 | .1598 | .1678 | | |
| .274 | | | .0485 | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL44)

ALPHAO( 7) = 8.167 BETAO ( 1) = .048

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .1238 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1135 | | | | | | | |
| .400 | | | | .3512 | .2454 | | .1609 | | |
| .402 | | | .3381 | | | | | | |
| .418 | | | | | | | | | -.0848 |
| .497 | .1037 | | | | | | | | |
| .503 | | | | | | | | .1077 | |
| .550 | | | | .3563 | .3772 | | | | |
| .565 | | | .3474 | | | | | | |
| .600 | | | | | | | .1990 | | |
| .637 | | .3247 | | | | | | | |
| .650 | | | | | | .3585 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3500 | | | | |
| .725 | | | | .2827 | | | | | |
| .730 | | | | | | | | | -.2590 |
| .750 | | | | | | .2923 | .3130 | | |
| .760 | | | .1535 | | | | | | |
| .775 | | | | .3880 | .4448 | | | | |
| .798 | | .0782 | | | | | | | |
| .808 | | | .1973 | | | | | | |
| .834 | -.0837 | | | | | | | | |
| .839 | | .0484 | | | | | | | |
| .850 | | | | .2064 | .2188 | .1892 | | | |
| .857 | | | .0488 | | | | | | |
| .862 | | | | | | | | .1386 | |
| .865 | -.0317 | | | | | | | | |
| .879 | | -.0404 | | | | | | | |
| .900 | -.0903 | | | .0759 | | | .1598 | | |
| .905 | | | -.0712 | | | | | | |
| .919 | | -.1317 | | | | | | | |
| .950 | | | | -.0278 | .0188 | .0547 | | | |
| .953 | | | -.1250 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1331 | | | | | | | | |
| 1.000 | | | -.2103 | | -.2352 | | -.1781 | | |

ARC97-019 1A81 LVAP(ALLMIL SEALED) LEFT WING BOT. (RETL45) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2880.0000 SQ.FT. XMRP = 978.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.200 RN/FT = 2.500
ELV-IB = 8.000 ELV-OB = .000
RUDDER = .000 SPDBRK = .000

ALPHAO( 1) = -6.332 BETAO ( 1) = -.120

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0337 | .0575 | .2870 | .6413 | .6054 | .5632 | .5751 | -.1189 | |
| .010 | .0050 | .0468 | .1697 | .0418 | .0005 | .0268 | .0425 | | |
| .020 | .0044 | .0541 | .1098 | -.0515 | -.0479 | -.0906 | -.0913 | -.1646 | |
| .040 | | .0578 | .0460 | | | | | | |
| .050 | .0003 | | | -.0777 | -.0910 | -.1274 | -.1285 | | |
| .069 | | | | | | | | -.1653 | |
| .080 | | | | -.0730 | | | | | |
| .081 | | | -.0072 | | | | | | |
| .086 | | .0354 | | | | | | | |
| .094 | .0064 | | | | | | | | |
| .150 | | | | -.0893 | -.1130 | -.0917 | -.1342 | | |
| .157 | | | | | | | | -.1633 | |
| .163 | | .0739 | | | | | | | |
| .177 | | | -.0085 | | | | | | |
| .229 | .0588 | | | | | | | | |
| .246 | | .0398 | | | | | | | |
| .250 | | | | -.0433 | -.1213 | -.1163 | -.1077 | | |
| .274 | | | -.0055 | | | | | | |
| .345 | | | | | | | | -.1216 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0201 | | | | | | | |
| .400 | | | | .0543 | -.1042 | | -.1277 | | |
| .402 | | | .1125 | | | | | | |
| .418 | | | | | | | | | -.1822 |
| .497 | -.0193 | | | | | | | | |
| .503 | | | | | | | | -.1179 | |
| .550 | | | | .0193 | -.0096 | | | | |
| .565 | | | .0246 | | | | | | |
| .609 | | | | | | | -.1324 | | |
| .637 | | .0568 | | | | | | | |
| .650 | | | | | | -.0890 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0506 | | | | |
| .725 | | | | .0626 | | | | | |
| .730 | | | | | | | | | -.2025 |
| .750 | | | | | | -.0457 | -.1558 | | |
| .760 | | | .0072 | | | | | | |
| .775 | | | | .1548 | .1152 | | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL45)

ALPHAO( 1) = -6.332 BETAO ( 1) = -.120

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .798 | | -.0275 | | | | | | | |
| .808 | | | .1215 | | | | | | |
| .834 | -.1081 | | | | | | | | |
| .839 | | .0010 | | | | | | | |
| .850 | | | | .1527 | .0927 | -.0511 | | | |
| .857 | | | .1078 | | | | | | |
| .862 | | | | | | | | -.1321 | |
| .865 | -.0784 | | | | | | | | |
| .879 | | -.0408 | | | | | | | |
| .900 | -.1142 | | | .0758 | | | -.1473 | | |
| .905 | | | -.0009 | | | | | | |
| .919 | | .0063 | | | | | | | |
| .950 | | | | .0048 | .0113 | -.0724 | | | |
| .953 | | | -.0423 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .985 | -.0425 | | | | | | | | |
| 1.000 | | | -.1298 | | -.0989 | | -.1223 | | |

ALPHAO( 2) = -4.288 BETAO ( 1) = -4.351

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0359 | .1185 | .3788 | .8211 | .7865 | .7637 | .7761 | -.0139 | |
| .010 | -.0105 | .0939 | .2497 | .1634 | .0930 | .1317 | .1758 | | |
| .020 | -.0375 | .0915 | .1893 | .0444 | .0373 | .0040 | .0050 | -.0599 | |
| .040 | | .1156 | .1319 | | | | | | |
| .050 | .0084 | | | -.0111 | -.0080 | -.0390 | -.0359 | | |
| .069 | | | | | | | | -.0701 | |
| .080 | | | | -.0273 | | | | | |
| .081 | | | .0384 | | | | | | |
| .088 | | .0958 | | | | | | | |
| .094 | -.0188 | | | | | | | | |
| .150 | | | | -.0422 | -.0384 | -.0281 | -.0457 | | |
| .157 | | | | | | | | -.0848 | |
| .183 | | .1480 | | | | | | | |
| .177 | | | .0294 | | | | | | |
| .228 | .1482 | | | | | | | | |
| .248 | | .0723 | | | | | | | |
| .250 | | | | .0014 | -.0477 | -.0408 | -.0382 | | |
| .274 | | | -.0854 | | | | | | |
| .345 | | | | | | | | -.0430 | |
| .362 | .0000 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL45)

ALPHAO( 2) = -4.288 BETAO ( 1) = -4.351

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .390 | | .0209 | | | | | | | |
| .400 | | | | -.0042 | -.0311 | | -.0491 | | |
| .402 | | | -.0170 | | | | | | |
| .418 | | | | | | | | | -.0814 |
| .497 | .0131 | | | | | | | | |
| .503 | | | | | | | | -.0487 | |
| .550 | | | | .0698 | -.0347 | | | | |
| .565 | | | .1285 | | | | | | |
| .600 | | | | | | | -.0616 | | |
| .637 | | .1421 | | | | | | | |
| .650 | | | | | | -.0602 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | -.0132 | | | | |
| .725 | | | | .1768 | | | | | |
| .730 | | | | | | | | | -.1041 |
| .750 | | | | | | -.1041 | -.0975 | | |
| .760 | | | .1042 | | | | | | |
| .775 | | | | .2523 | .1820 | | | | |
| .798 | | .0680 | | | | | | | |
| .808 | | | .3685 | | | | | | |
| .834 | -.0342 | | | | | | | | |
| .839 | | .0930 | | | | | | | |
| .850 | | | | .2755 | .1724 | -.1105 | | | |
| .857 | | | .2817 | | | | | | |
| .862 | | | | | | | | -.1014 | |
| .865 | .0195 | | | | | | | | |
| .879 | | .2056 | | | | | | | |
| .900 | -.0358 | | | .1828 | | | -.1462 | | |
| .905 | | | .1045 | | | | | | |
| .919 | | .1114 | | | | | | | |
| .950 | | | | .0930 | .1228 | -.0595 | | | |
| .953 | | | .0461 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0384 | | | | | | | | |
| 1.000 | | | -.0951 | | -.1101 | | -.1506 | | |

ARC97-013 (A8) LVAP(ALLHL SEALED) LEFT WING BOT. (RE'L45)

ALPHA0( 2) = -4.320 BETA0 ( 2) = -.149

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0072 | .0528 | .2903 | .6239 | .8137 | .5844 | .6073 | -.0834 | |
| .010 | -.0165 | .0481 | .1649 | .0979 | .0213 | .0527 | .0856 | | |
| .020 | -.0185 | .0478 | .1076 | -.0011 | -.0265 | -.0591 | -.0568 | -.1173 | |
| .040 | | .0545 | .0557 | | | | | | |
| .050 | -.0097 | | | -.0398 | -.0676 | -.0935 | -.0941 | | |
| .069 | | | | | | | | -.1227 | |
| .080 | | | | -.0574 | | | | | |
| .081 | | | -.0073 | | | | | | |
| .086 | | .0354 | | | | | | | |
| .094 | -.0388 | | | | | | | | |
| .150 | | | | -.0905 | -.0916 | -.0697 | -.1035 | | |
| .157 | | | | | | | | -.1169 | |
| .163 | | .0628 | | | | | | | |
| .177 | | | -.0140 | | | | | | |
| .229 | .0532 | | | | | | | | |
| .246 | | .0349 | | | | | | | |
| .250 | | | | -.0445 | -.0983 | -.0917 | -.0857 | | |
| .274 | | | -.0445 | | | | | | |
| .345 | | | | | | | | -.0963 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0149 | | | | | | | |
| .400 | | | | .0459 | -.0982 | | -.1030 | | |
| .402 | | | .1103 | | | | | | |
| .418 | | | | | | | | | -.1370 |
| .497 | -.0101 | | | | | | | | |
| .503 | | | | | | | | -.0988 | |
| .550 | | | | .0438 | -.0024 | | | | |
| .565 | | | .0409 | | | | | | |
| .600 | | | | | | | -.1132 | | |
| .637 | | .0813 | | | | | | | |
| .650 | | | | | | -.0883 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0775 | | | | |
| .725 | | | | .1114 | | | | | |
| .730 | | | | | | | | | -.1800 |
| .750 | | | | | | -.0271 | -.1431 | | |
| .760 | | | .0453 | | | | | | |
| .775 | | | | .1858 | .1190 | | | | |
| .798 | | -.0035 | | | | | | | |
| .808 | | | .1783 | | | | | | |
| .834 | -.1085 | | | | | | | | |
| .839 | | .0225 | | | | | | | |
| .850 | | | | .1837 | .1163 | -.0359 | | | |
| .857 | | | .1180 | | | | | | |
| .862 | | | | | | | | -.1214 | |

ARC97-019 1A8: LVAP(ALLHL SEALED) LEFT WING BOT. (RETL45)

ALPHA0( 2) = -4.320 BETA0 ( 2) = -.149

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.0723 | | | | | | | | |
| .879 | | .0092 | | | | | | | |
| .900 | -.1024 | | | .0841 | | | -.1414 | | |
| .905 | | | .0021 | | | | | | |
| .919 | | .0001 | | | | | | | |
| .950 | | | | .0079 | .0324 | -.0602 | | | |
| .953 | | | -.0482 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0517 | | | | | | | | |
| 1.000 | | | -.1362 | | -.1131 | | -.1400 | | |

ALPHA0( 2) = -4.300 BETA0 ( 3) = 3.413

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0284 | -.0252 | .1955 | .5351 | .3932 | .4282 | .4753 | -.1486 | |
| .010 | -.0222 | -.0095 | .1599 | .0116 | -.0845 | .0057 | .0039 | | |
| .020 | -.0242 | -.0128 | .1241 | -.0781 | -.1126 | -.0928 | -.1126 | -.1785 | |
| .040 | | -.0182 | .0123 | | | | | | |
| .050 | -.0600 | | | -.1248 | -.1343 | -.1379 | -.1481 | | |
| .069 | | | | | | | | -.1798 | |
| .080 | | | | -.1168 | | | | | |
| .081 | | | -.0396 | | | | | | |
| .088 | | -.0185 | | | | | | | |
| .094 | -.0532 | | | | | | | | |
| .150 | | | | -.0887 | -.1377 | -.1105 | -.1529 | | |
| .157 | | | | | | | | -.1764 | |
| .163 | | .0099 | | | | | | | |
| .177 | | | -.0398 | | | | | | |
| .229 | -.0063 | | | | | | | | |
| .246 | | .0085 | | | | | | | |
| .250 | | | | -.0589 | -.1066 | -.1481 | -.1217 | | |
| .274 | | | -.0456 | | | | | | |
| .345 | | | | | | | | -.1438 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0270 | | | | | | | |
| .400 | | | | .0437 | -.0281 | | -.1513 | | |
| .402 | | | .0809 | | | | | | |
| .418 | | | | | | | | | -.1911 |
| .497 | .0035 | | | | | | | | |
| .503 | | | | | | | | -.1448 | |
| .550 | | | | .0218 | .0180 | | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL45)

ALPHAO( 2) = -4.300 BETAO ( 3) = 3.413

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .585 | | | .0555 | | | | | | |
| .600 | | | | | | | -.1309 | | |
| .637 | | .0388 | | | | | | | |
| .650 | | | | | | -.0154 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0409 | | | | |
| .725 | | | | .0375 | | | | | |
| .730 | | | | | | | | | -.2047 |
| .750 | | | | | | -.0090 | -.0983 | | |
| .760 | | | -.0557 | | | | | | |
| .775 | | | | .0779 | .1013 | | | | |
| .798 | | -.1093 | | | | | | | |
| .808 | | | -.0265 | | | | | | |
| .834 | -.1562 | | | | | | | | |
| .839 | | -.1110 | | | | | | | |
| .850 | | | | .0770 | .0966 | -.0154 | | | |
| .857 | | | -.0834 | | | | | | |
| .862 | | | | | | | | -.1178 | |
| .865 | -.1481 | | | | | | | | |
| .879 | | -.1287 | | | | | | | |
| .900 | -.1224 | | | -.0123 | | | -.0813 | | |
| .905 | | | -.1188 | | | | | | |
| .919 | | -.1163 | | | | | | | |
| .950 | | | | -.0835 | -.0384 | -.0581 | | | |
| .953 | | | -.1146 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0845 | | | | | | | | |
| 1.000 | | | -.1626 | | -.1432 | | -.1285 | | |

ALPHAO( 3) = -2.199 BETAO ( 1) = -.185

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0143 | .0414 | .2567 | .6898 | .6225 | .6178 | .8343 | -.0419 | |
| .010 | -.0353 | .0391 | .1701 | .1263 | .0484 | .0831 | .1216 | | |
| .030 | -.0349 | .0421 | .1239 | .0182 | .0056 | -.0229 | -.0253 | -.0721 | |
| .040 | | .0528 | .0830 | | | | | | |
| .050 | -.0228 | | | -.0289 | -.0336 | -.0617 | -.0618 | | |
| .069 | | | | | | | | -.0819 | |
| .080 | | | | -.0451 | | | | | |
| .081 | | | .0153 | | | | | | |
| .086 | | .0393 | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL45)

ALPHAO( 3) = -2.199 BETAO ( 1) = .165

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0752 | | | | | | | | |
| .150 | | | | -.0819 | -.0657 | -.0469 | -.0743 | | |
| .157 | | | | | | | | -.0806 | |
| .163 | | .0632 | | | | | | | |
| .177 | | | -.0243 | | | | | | |
| .229 | .0543 | | | | | | | | |
| .246 | | .0319 | | | | | | | |
| .250 | | | | -.0421 | -.0764 | -.069 | -.0612 | | |
| .274 | | | -.0541 | | | | | | |
| .345 | | | | | | | | -.0711 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0083 | | | | | | | |
| .400 | | | | .0560 | -.0869 | | -.0765 | | |
| .402 | | | .1145 | | | | | | |
| .418 | | | | | | | | | -.0923 |
| .497 | .0127 | | | | | | | | |
| .503 | | | | | | | | -.0765 | |
| .550 | | | | .0510 | .0029 | | | | |
| .565 | | | .0578 | | | | | | |
| .600 | | | | | | | -.0945 | | |
| .637 | | .0764 | | | | | | | |
| .650 | | | | | | -.0933 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0944 | | | | |
| .725 | | | | .1415 | | | | | |
| .730 | | | | | | | | | -.1194 |
| .750 | | | | | | -.0026 | -.1267 | | |
| .760 | | | .0692 | | | | | | |
| .775 | | | | .2187 | .1511 | | | | |
| .798 | | .0021 | | | | | | | |
| .808 | | | .2277 | | | | | | |
| .834 | -.0992 | | | | | | | | |
| .839 | | .0389 | | | | | | | |
| .850 | | | | .1945 | .1491 | -.0127 | | | |
| .857 | | | .1279 | | | | | | |
| .862 | | | | | | | | -.1153 | |
| .865 | -.0654 | | | | | | | | |
| .879 | | .0295 | | | | | | | |
| .900 | -.0951 | | | .1062 | | | -.1328 | | |
| .905 | | | .0032 | | | | | | |
| .919 | | -.0083 | | | | | | | |
| .950 | | | | .0198 | .0467 | -.0483 | | | |
| .953 | | | -.0521 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0554 | | | | | | | | |

ARC97-018 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL45)

ALPHAO( 3) = -2.198 BETAO ( 1) = -.185

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1399 | | -.1194 | | -.1511 | | |

ALPHAO( 4) = -.118 BETAO ( 1) = -6.442

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0333 | .1245 | .4560 | .9290 | .8835 | .8729 | .8925 | .1187 | |
| .010 | .0041 | .1071 | .3292 | .2468 | .1800 | .2317 | .3139 | | |
| .020 | -.0243 | .0828 | .2667 | .1092 | .1363 | .1235 | .1101 | .0791 | |
| .040 | | .0709 | .1002 | | | | | | |
| .050 | -.0419 | | | .0501 | .09 3 | .0769 | .0708 | | |
| .069 | | | | | | | | .0534 | |
| .080 | | | | .0210 | | | | | |
| .081 | | | .1138 | | | | | | |
| .086 | | .1399 | | | | | | | |
| .094 | -.0159 | | | | | | | | |
| .150 | | | | .0207 | .0434 | .0875 | .0638 | | |
| .157 | | | | | | | | .0466 | |
| .163 | | .1392 | | | | | | | |
| .177 | | | .0099 | | | | | | |
| .229 | .1265 | | | | | | | | |
| .246 | | .0238 | | | | | | | |
| .250 | | | | .0124 | .0241 | .0527 | .0812 | | |
| .274 | | | .0390 | | | | | | |
| .345 | | | | | | | | .0547 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0881 | | | | | | | |
| .400 | | | | .0194 | .0188 | | .0459 | | |
| .402 | | | .0189 | | | | | | |
| .418 | | | | | | | | | .0452 |
| .497 | .0558 | | | | | | | | |
| .503 | | | | | | | | .0402 | |
| .550 | | | | .0590 | .0338 | | | | |
| .565 | | | .2012 | | | | | | |
| .600 | | | | | | | .0134 | | |
| .637 | | .1997 | | | | | | | |
| .650 | | | | | | .0000 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0173 | | | | |
| .725 | | | | .3004 | | | | | |
| .730 | | | | | | | | | -.0113 |
| .750 | | | | | | -.0378 | -.0387 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL45)

ALPHAO( 4) = -.118 BETAO ( 1) = -8.448

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .2821 | | | | | | |
| .775 | | | | .3390 | .2509 | | | | |
| .798 | | .1192 | | | | | | | |
| .808 | | | .4520 | | | | | | |
| .834 | -.0098 | | | | | | | | |
| .839 | | .3620 | | | | | | | |
| .850 | | | | .4049 | .2499 | -.0730 | | | |
| .857 | | | .3352 | | | | | | |
| .862 | | | | | | | | -.0644 | |
| .865 | .0487 | | | | | | | | |
| .879 | | .3156 | | | | | | | |
| .900 | .1711 | | | .2978 | | | -.1010 | | |
| .905 | | | .1830 | | | | | | |
| .919 | | .1526 | | | | | | | |
| .950 | | | | .1737 | .2102 | -.0656 | | | |
| .953 | | | .0948 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0288 | | | | | | | | |
| 1.000 | | | -.0807 | | -.1439 | | -.1460 | | |

ALPHAO( 4) = -.115 BETAO ( 2) = -4.378

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0055 | .0819 | .4012 | .8704 | .8056 | .8037 | .8148 | .0754 | |
| .010 | -.0225 | .0702 | .2892 | .2127 | .1418 | .1961 | .2667 | | |
| .020 | -.0465 | .0477 | .2213 | .0827 | .0994 | .0888 | .0772 | .0429 | |
| .040 | | .0374 | .0659 | | | | | | |
| .050 | -.0205 | | | .0195 | .0620 | .0416 | .0366 | | |
| .069 | | | | | | | | .0218 | |
| .080 | | | | -.0020 | | | | | |
| .081 | | | .0890 | | | | | | |
| .086 | | .0989 | | | | | | | |
| .094 | -.0559 | | | | | | | | |
| .150 | | | | -.0030 | .0118 | .0343 | .0308 | | |
| .157 | | | | | | | | .0165 | |
| .163 | | .1579 | | | | | | | |
| .177 | | | -.0098 | | | | | | |
| .229 | .0625 | | | | | | | | |
| .248 | | .0130 | | | | | | | |
| .250 | | | | -.0010 | -.0054 | .0157 | .0294 | | |
| .274 | | | .0038 | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL45)

ALPHAO( 4) = - 15 BETAO ( 2) = -4.378

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .8730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .0223 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0430 | | | | | | | |
| .400 | | | | -.0063 | -.0003 | | .0128 | | |
| .402 | | | -.0069 | | | | | | |
| .418 | | | | | | | | | .0100 |
| .497 | .0237 | | | | | | | | |
| .503 | | | | | | | | .0077 | |
| .550 | | | | .0930 | .0033 | | | | |
| .565 | | | .1632 | | | | | | |
| .600 | | | | | | | -.0150 | | |
| .637 | | .1536 | | | | | | | |
| .650 | | | | | | -.0208 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0139 | | | | |
| .725 | | | | .2355 | | | | | |
| .730 | | | | | | | | | -.0407 |
| .750 | | | | | | -.0637 | -.0566 | | |
| .760 | | | .1107 | | | | | | |
| .775 | | | | .2901 | .2170 | | | | |
| .798 | | .0901 | | | | | | | |
| .808 | | | .4147 | | | | | | |
| .834 | -.0242 | | | | | | | | |
| .839 | | .2314 | | | | | | | |
| .850 | | | | .3190 | .2070 | -.0954 | | | |
| .857 | | | .2959 | | | | | | |
| .862 | | | | | | | | -.0814 | |
| .865 | .0234 | | | | | | | | |
| .879 | | .2384 | | | | | | | |
| .900 | .0882 | | | .2332 | | | -.1198 | | |
| .905 | | | .1311 | | | | | | |
| .919 | | .1356 | | | | | | | |
| .950 | | | | .1338 | .1673 | -.0414 | | | |
| .953 | | | .0578 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0373 | | | | | | | | |
| 1.000 | | | -.1072 | | -.1380 | | -.1542 | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL45)

ALPHAO( 4) = -.112 BETAO ( 3) = -2.264

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0284 | .0374 | .3535 | .7971 | .7268 | .7218 | .7298 | .0385 | |
| .010 | -.0478 | .0360 | .2621 | .1878 | .1063 | .1521 | .2194 | | |
| .020 | -.0637 | .0157 | .2014 | .0688 | .0663 | .0483 | .0498 | .0132 | |
| .040 | | .0127 | .1154 | | | | | | |
| .050 | -.0222 | | | .0127 | .0290 | .0057 | .0107 | | |
| .069 | | | | | | | | -.0057 | |
| 080 | | | | -.0038 | | | | | |
| .081 | | | .0354 | | | | | | |
| .086 | | .0864 | | | | | | | |
| .094 | -.0478 | | | | | | | | |
| .150 | | | | -.0351 | -.0138 | .0040 | -.0014 | | |
| .157 | | | | | | | | -.0118 | |
| .163 | | .1148 | | | | | | | |
| .177 | | | -.0436 | | | | | | |
| .229 | .0508 | | | | | | | | |
| .246 | | -.0191 | | | | | | | |
| .250 | | | | -.0282 | -.0296 | -.0149 | -.0007 | | |
| .274 | | | -.0186 | | | | | | |
| .345 | | | | | | | | -.0077 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0076 | | | | | | | |
| .400 | | | | -.0190 | -.0350 | | -.0155 | | |
| .402 | | | -.0318 | | | | | | |
| .418 | | | | | | | | | -.0213 |
| .497 | -.0039 | | | | | | | | |
| .503 | | | | | | | | -.0202 | |
| .550 | | | | .0912 | -.0307 | | | | |
| .565 | | | .1051 | | | | | | |
| .600 | | | | | | | -.0375 | | |
| .637 | | .1162 | | | | | | | |
| .650 | | | | | | -.0493 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1065 | | | | |
| .725 | | | | .1911 | | | | | |
| .730 | | | | | | | | | -.0655 |
| .750 | | | | | | -.0891 | -.0827 | | |
| .760 | | | .0941 | | | | | | |
| .775 | | | | .2445 | .1891 | | | | |
| .798 | | .0692 | | | | | | | |
| .839 | | | .3824 | | | | | | |
| .834 | -.0288 | | | | | | | | |
| .839 | | .1145 | | | | | | | |
| .850 | | | | .2505 | .1884 | -.0402 | | | |
| .857 | | | .2594 | | | | | | |
| .862 | | | | | | | | -.0921 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL45)

ALPHAO( 4) = -.112 BETAO ( 3) = -2.264

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | .0140 | | | | | | | | |
| .879 | | .1529 | | | | | | | |
| .900 | -.0566 | | | .1772 | | | -.1367 | | |
| .905 | | | .0964 | | | | | | |
| .919 | | .0999 | | | | | | | |
| .950 | | | | .0850 | .1210 | -.0247 | | | |
| .953 | | | .0327 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0464 | | | | | | | | |
| 1.000 | | | -.1217 | | -.1295 | | -.1570 | | |

ALPHAO( 4) = -.108 BETAO ( 4) = -.175

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0382 | .0127 | .2848 | .7107 | .6522 | .6450 | .6534 | .0020 | |
| .010 | -.0470 | .0047 | .2131 | .1493 | .0291 | .1141 | .1658 | | |
| .020 | -.0301 | .0100 | .1547 | .0397 | .0491 | .0146 | .0114 | -.0183 | |
| .040 | | .0551 | .0290 | | | | | | |
| .050 | -.0450 | | | -.0127 | .0012 | -.0257 | -.0271 | | |
| .069 | | | | | | | | -.0341 | |
| .080 | | | | -.0236 | | | | | |
| .081 | | | .0257 | | | | | | |
| .086 | | .0337 | | | | | | | |
| .094 | -.0918 | | | | | | | | |
| .150 | | | | -.0599 | -.0451 | -.0220 | -.0358 | | |
| .157 | | | | | | | | -.0398 | |
| .163 | | .0934 | | | | | | | |
| .177 | | | -.0586 | | | | | | |
| .229 | .0389 | | | | | | | | |
| .246 | | -.0120 | | | | | | | |
| .250 | | | | -.0599 | -.0554 | -.0426 | -.0287 | | |
| .274 | | | -.0430 | | | | | | |
| .345 | | | | | | | | -.0352 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0027 | | | | | | | |
| .400 | | | | .0538 | -.0851 | | -.0423 | | |
| .402 | | | .1291 | | | | | | |
| .418 | | | | | | | | | -.0488 |
| .497 | .0177 | | | | | | | | |
| .503 | | | | | | | | -.0453 | |
| .550 | | | | .0711 | .0156 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL45)

ALPHAO( 4) = -.108 BETAO ( 4) = -.175

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .0824 | | | | | | |
| .600 | | | | | | | -.0629 | | |
| .637 | | .0927 | | | | | | | |
| .650 | | | | | | -.0783 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1230 | | | | |
| .725 | | | | .1728 | | | | | |
| .730 | | | | | | | | | -.0856 |
| .750 | | | | | | -.0065 | -.1021 | | |
| .760 | | | .0871 | | | | | | |
| .775 | | | | .2523 | .1719 | | | | |
| .798 | | .0154 | | | | | | | |
| .808 | | | .2534 | | | | | | |
| .834 | -.0938 | | | | | | | | |
| .839 | | .0517 | | | | | | | |
| .850 | | | | .2433 | .1897 | .0164 | | | |
| .857 | | | .1537 | | | | | | |
| .862 | | | | | | | | -.1028 | |
| .865 | -.0581 | | | | | | | | |
| .879 | | .0491 | | | | | | | |
| .900 | -.0878 | | | .1484 | | | -.1240 | | |
| .905 | | | .0310 | | | | | | |
| .919 | | .0047 | | | | | | | |
| .950 | | | | .0501 | .0985 | -.0095 | | | |
| .953 | | | -.0333 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0501 | | | | | | | | |
| 1.000 | | | -.1390 | | -.1138 | | -.1531 | | |

ALPHAO( 4) = -.100 BETAO ( 5) = 1.938

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0581 | -.0149 | .2005 | .6254 | .5598 | .5687 | .5834 | -.0327 | |
| .010 | -.0374 | -.0159 | .1600 | .1120 | .0448 | .0798 | .1258 | | |
| .020 | -.0273 | -.0189 | .1116 | .0120 | .0135 | -.0150 | -.0150 | -.0516 | |
| .040 | | .0048 | .0696 | | | | | | |
| .050 | -.0708 | | | -.0391 | -.0235 | -.0543 | -.0517 | | |
| .069 | | | | | | | | -.0638 | |
| .080 | | | | -.0583 | | | | | |
| .081 | | | -.0081 | | | | | | |
| .086 | | -.0022 | | | | | | | |

AR(97-01B IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL48)

ALPHA0( 4) = -.100 BETA0 ( 8) = 1.030

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.1095 | | | | | | | | |
| .150 | | | | -.0900 | -.0692 | -.0484 | -.0636 | | |
| .157 | | | | | | | | -.0651 | |
| .183 | | .0349 | | | | | | | |
| .177 | | | -.0285 | | | | | | |
| .229 | .0003 | | | | | | | | |
| .246 | | .0108 | | | | | | | |
| .250 | | | | -.0530 | -.0858 | -.0727 | -.0529 | | |
| .274 | | | -.0092 | | | | | | |
| .345 | | | | | | | | -.0590 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0172 | | | | | | | |
| .400 | | | | .0794 | -.0805 | | -.0705 | | |
| .402 | | | .1208 | | | | | | |
| .418 | | | | | | | | | -.0785 |
| .497 | .0425 | | | | | | | | |
| .503 | | | | | | | | -.0678 | |
| .550 | | | | .0916 | .0471 | | | | |
| .565 | | | .0966 | | | | | | |
| .600 | | | | | | | -.0854 | | |
| .637 | | .1005 | | | | | | | |
| .650 | | | | | | .0188 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1393 | | | | |
| .725 | | | | .1543 | | | | | |
| .730 | | | | | | | | | -.1052 |
| .750 | | | | | | .0647 | -.0915 | | |
| .760 | | | .0285 | | | | | | |
| .775 | | | | .2649 | .2288 | | | | |
| .798 | | -.0451 | | | | | | | |
| .808 | | | .1310 | | | | | | |
| .834 | -.1331 | | | | | | | | |
| .839 | | -.0428 | | | | | | | |
| .850 | | | | .1818 | .2011 | .0505 | | | |
| .857 | | | .0442 | | | | | | |
| .862 | | | | | | | | -.0974 | |
| .865 | -.1055 | | | | | | | | |
| .879 | | -.0174 | | | | | | | |
| .900 | -.1098 | | | .0722 | | | -.0847 | | |
| .905 | | | -.0502 | | | | | | |
| .919 | | -.0554 | | | | | | | |
| .950 | | | | -.0182 | .0372 | .0130 | | | |
| .953 | | | -.0895 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .985 | -.0733 | | | | | | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL45)

ALPHAO( 4) = -.100 BETAO ( 5) = 1.938

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1526 | | -.1339 | | -.1510 | | |

ALPHAO( 4) = -.095 BETAO ( 6) = 3.383

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0778 | -.0548 | .1540 | .5264 | .4886 | .4834 | .5227 | -.0626 | |
| .010 | -.0793 | -.0354 | .1359 | .0723 | .0046 | .0422 | .0896 | | |
| .020 | -.0695 | -.0367 | .1092 | -.0182 | -.0294 | -.0453 | -.0413 | -.0784 | |
| .040 | | -.0397 | .0114 | | | | | | |
| .050 | -.0863 | | | -.0707 | -.0614 | -.0787 | -.0764 | | |
| .069 | | | | | | | | -.0888 | |
| .080 | | | | -.0889 | | | | | |
| .081 | | | -.0437 | | | | | | |
| .086 | | -.0508 | | | | | | | |
| .094 | -.0897 | | | | | | | | |
| .150 | | | | -.0628 | -.0977 | -.0633 | -.0865 | | |
| .157 | | | | | | | | -.0889 | |
| .163 | | -.0093 | | | | | | | |
| .177 | | | -.0313 | | | | | | |
| .229 | -.0294 | | | | | | | | |
| .246 | | .0074 | | | | | | | |
| .250 | | | | -.0519 | -.0890 | -.0943 | -.0717 | | |
| .274 | | | -.0286 | | | | | | |
| .345 | | | | | | | | -.0808 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0213 | | | | | | | |
| .400 | | | | .0796 | -.0024 | | -.0898 | | |
| .402 | | | .1046 | | | | | | |
| .418 | | | | | | | | | -.0995 |
| .497 | -.0132 | | | | | | | | |
| .503 | | | | | | | | -.0869 | |
| .550 | | | | .1080 | .0984 | | | | |
| .565 | | | .0922 | | | | | | |
| .600 | | | | | | | -.0683 | | |
| .637 | | .0648 | | | | | | | |
| .650 | | | | | | .0781 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1509 | | | | |
| .725 | | | | .1060 | | | | | |
| .730 | | | | | | | | | -.1238 |
| .750 | | | | | | .0848 | -.0234 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL45)

ALPHAO( 4) = -.095 BETAO ( 8) = 3.383

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | -.0193 | | | | | | |
| .775 | | | | .2197 | .2375 | | | | |
| .798 | | -.0800 | | | | | | | |
| .808 | | | .0498 | | | | | | |
| .834 | -.1483 | | | | | | | | |
| .839 | | -.0704 | | | | | | | |
| .850 | | | | .0925 | .1453 | .0781 | | | |
| .857 | | | .0027 | | | | | | |
| .862 | | | | | | | | -.0853 | |
| .865 | -.1268 | | | | | | | | |
| .879 | | -.0427 | | | | | | | |
| .900 | -.1120 | | | .0003 | | | -.0031 | | |
| .905 | | | -.0684 | | | | | | |
| .919 | | -.0917 | | | | | | | |
| .950 | | | | -.0717 | -.0305 | .0113 | | | |
| .953 | | | -.1118 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0842 | | | | | | | | |
| 1.000 | | | -.1708 | | -.1481 | | -.1420 | | |

ALPHAO( 4) = -.082 BETAO ( 7) = 6.028

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0875 | -.0861 | .0867 | .4289 | .4302 | .4221 | .4444 | -.0907 | |
| .010 | -.0814 | -.0827 | .0733 | .0380 | -.0225 | .0090 | .0393 | | |
| .020 | -.0892 | -.0784 | .0573 | -.0319 | -.0532 | -.0736 | -.0741 | -.1018 | |
| .040 | | -.0787 | .0186 | | | | | | |
| .050 | -.1168 | | | -.0431 | -.0805 | -.1030 | -.1058 | | |
| .069 | | | | | | | | -.1075 | |
| .080 | | | | -.0629 | | | | | |
| .081 | | | -.0264 | | | | | | |
| .088 | | -.0301 | | | | | | | |
| .094 | -.0978 | | | | | | | | |
| .150 | | | | -.0800 | -.0941 | -.0758 | -.1099 | | |
| .157 | | | | | | | | -.0974 | |
| .163 | | .0119 | | | | | | | |
| .177 | | | -.0617 | | | | | | |
| .229 | -.0791 | | | | | | | | |
| .246 | | -.0231 | | | | | | | |
| .250 | | | | -.0487 | -.0848 | -.0933 | -.0792 | | |
| .274 | | | -.0047 | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL45)

ALPHAO( 4) = -.089 BETAO ( 7) = 8.028

SECTION ( 11LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | -.0738 | |
| .382 | .0000 | | | | | | | | |
| .390 | | .0339 | | | | | | | |
| .400 | | | | .1052 | .0702 | | -.0818 | | |
| .402 | | | .1239 | | | | | | |
| .418 | | | | | | | | | -.0924 |
| .497 | -.0242 | | | | | | | | |
| .503 | | | | | | | | -.0704 | |
| .550 | | | | .1379 | .1627 | | | | |
| .565 | | | .1056 | | | | | | |
| .600 | | | | | | | .0279 | | |
| .637 | | .0733 | | | | | | | |
| .650 | | | | | | .1050 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1029 | | | | |
| .725 | | | | .0350 | | | | | |
| .730 | | | | | | | | | -.1120 |
| 750 | | | | | | .0851 | .0725 | | |
| .760 | | | -.0661 | | | | | | |
| .775 | | | | .0881 | .2103 | | | | |
| .798 | | -.1028 | | | | | | | |
| .808 | | | -.0144 | | | | | | |
| .834 | -.1198 | | | | | | | | |
| .839 | | -.0428 | | | | | | | |
| .850 | | | | .0111 | .0642 | .0845 | | | |
| .857 | | | -.0431 | | | | | | |
| .862 | | | | | | | | -.0297 | |
| .865 | -.0723 | | | | | | | | |
| .879 | | -.0828 | | | | | | | |
| .900 | -.0949 | | | -.0525 | | | .0317 | | |
| .905 | | | -.1027 | | | | | | |
| .919 | | -.1279 | | | | | | | |
| .950 | | | | -.1034 | -.0984 | -.0228 | | | |
| .953 | | | -.1404 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .955 | -.0801 | | | | | | | | |
| 1.000 | | | -.1700 | | -.1734 | | -.1383 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL45)

ALPHA0( 5) = 1.933 BETA0 ( 1) = -.155

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0521 | -.0203 | .2909 | .7189 | .6709 | .6845 | .6790 | .0511 | |
| .010 | -.0377 | -.0083 | .2272 | .1784 | .1144 | .1627 | .2279 | | |
| .020 | -.0394 | .0154 | .1783 | .0673 | .0815 | .0686 | .0640 | .0382 | |
| .040 | | .0534 | .0843 | | | | | | |
| .050 | -.0738 | | | .0100 | .0355 | .0241 | .0269 | | |
| .069 | | | | | | | | .0176 | |
| .080 | | | | -.0078 | | | | | |
| .081 | | | .0186 | | | | | | |
| .086 | | .0338 | | | | | | | |
| .094 | .0071 | | | | | | | | |
| .150 | | | | -.0474 | -.0150 | .0135 | .0131 | | |
| .157 | | | | | | | | .0066 | |
| .183 | | .0081 | | | | | | | |
| .177 | | | -.0284 | | | | | | |
| .229 | .0847 | | | | | | | | |
| .246 | | .0206 | | | | | | | |
| .250 | | | | -.0121 | -.0253 | -.0068 | .0153 | | |
| .274 | | | -.0291 | | | | | | |
| .345 | | | | | | | | .0095 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0019 | | | | | | | |
| .400 | | | | .0060 | -.0320 | | -.0018 | | |
| .402 | | | .0973 | | | | | | |
| .418 | | | | | | | | | -.0169 |
| .497 | .0095 | | | | | | | | |
| .503 | | | | | | | | -.0050 | |
| .550 | | | | .1112 | .0171 | | | | |
| .565 | | | .1123 | | | | | | |
| .600 | | | | | | | -.0258 | | |
| .637 | | .1238 | | | | | | | |
| .650 | | | | | | -.0344 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1808 | | | | |
| .725 | | | | .2345 | | | | | |
| .730 | | | | | | | | | -.0843 |
| .750 | | | | | | .0040 | -.0702 | | |
| .760 | | | .1299 | | | | | | |
| .775 | | | | .3129 | .2310 | | | | |
| .798 | | .0418 | | | | | | | |
| .808 | | | .3022 | | | | | | |
| .834 | -.0883 | | | | | | | | |
| .839 | | .0889 | | | | | | | |
| .850 | | | | .2821 | .2409 | .0498 | | | |
| .857 | | | .1903 | | | | | | |
| .862 | | | | | | | | -.0911 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL45)

ALPHA0( 8) = 1.933 BETA0 ( 1) = -.155

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.0428 | | | | | | | | |
| .870 | | .0838 | | | | | | | |
| .900 | -.0812 | | | .1753 | | | -.1130 | | |
| .905 | | | .0503 | | | | | | |
| .919 | | .0103 | | | | | | | |
| .950 | | | | .0741 | .1201 | .0298 | | | |
| .953 | | | -.0237 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0486 | | | | | | | | |
| 1.000 | | | -.1460 | | -.1469 | | -.1623 | | |

ALPHA0( 8) = 3.402 BETA0 ( 1) = -4.411

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0298 | .0406 | .3950 | .8882 | .8517 | .8547 | .8348 | .1681 | |
| .010 | -.0239 | .0413 | .3225 | .2779 | .2215 | .3088 | .3746 | | |
| .020 | -.0192 | .0268 | .2675 | .1480 | .2139 | .2106 | .1878 | .1580 | |
| .040 | | .0273 | .1808 | | | | | | |
| .050 | .0811 | | | .0843 | .1427 | .1491 | .1848 | | |
| .060 | | | | | | | | .1279 | |
| .080 | | | | .0685 | | | | | |
| .081 | | | .0905 | | | | | | |
| .088 | | .1000 | | | | | | | |
| .094 | .0621 | | | | | | | | |
| .150 | | | | .0352 | .0831 | .1144 | .1377 | | |
| .157 | | | | | | | | .1124 | |
| .163 | | .1504 | | | | | | | |
| .177 | | | .0514 | | | | | | |
| .229 | .0226 | | | | | | | | |
| .245 | | .0707 | | | | | | | |
| .250 | | | | .0639 | .0888 | .0982 | .1210 | | |
| .274 | | | .0181 | | | | | | |
| .345 | | | | | | | | .1026 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0471 | | | | | | | |
| .400 | | | | .0352 | .0723 | | .0979 | | |
| .402 | | | .0231 | | | | | | |
| .418 | | | | | | | | | .0473 |
| .497 | .0132 | | | | | | | | |
| .503 | | | | | | | | .0810 | |
| .550 | | | | .1678 | .0866 | | | | |

ARC97-019 TAB1 LVAR(ALLPL SEALED) LEFT WING BOT.

ALPHA0( 6 ) = 3.402 BETA0 ( 1) = -4.411 (RET=45)

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | | | | | | | |
| .600 | | | .2118 | | | | | | |
| .637 | | | | | | | | | |
| .650 | | .2213 | | | | | .0675 | | |
| .675 | | | | | | .0635 | | | |
| .700 | .0000 | | | | | | | | |
| .725 | | | | | .2713 | | | .0600 | |
| .730 | | | | .3749 | | | | | |
| .750 | | | | | | | | | |
| .760 | | | | | | -.0077 | .0124 | | -.0807 |
| .775 | | | .3894 | | | | | | |
| .798 | | .2653 | | | .4410 | .3350 | | | |
| .808 | | | | | | | | | |
| .834 | .0165 | | .4888 | | | | | | |
| .839 | | | | | | | | | |
| .850 | | .2546 | | | | | | | |
| .857 | | | | | .3628 | .3541 | .0831 | | |
| .862 | | | .2925 | | | | | | |
| .865 | .0793 | | | | | | | | |
| .879 | | .1504 | | | | | | | -.0493 |
| .900 | .0513 | | | | | | | | |
| .905 | | | | | .2481 | | | | |
| .919 | | | .1043 | | | | | -.0629 | |
| .950 | | .0139 | | | | | | | |
| .953 | | | | | .1400 | .1878 | .0790 | | |
| .955 | | | .0218 | | | | | | |
| .965 | -.0478 | .0000 | | | | | | | |
| 1.000 | | | | | | | | | |
| | | | -.1306 | | -.1650 | | -.1461 | | |

ALPHA0( 6) = 3.403 BETA0 ( 2) = -.163

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0573 | -.0183 | .2982 | .7449 | .6950 | .1399 | .6398 | .0931 | |
| .010 | -.0538 | -.0013 | .2688 | .2171 | .1580 | .2198 | .2938 | | |
| .020 | -.0511 | .0491 | .2324 | .1082 | .1503 | .1303 | .1259 | .0931 | |
| .040 | | .0718 | .1188 | | | | | | |
| .050 | .0170 | | | | | | | | |
| .069 | | | | .0428 | .0607 | .0837 | .0968 | | |
| .080 | | | | | | | | | |
| .088 | | | .0142 | | | | | .0739 | |
| .088 | | .0277 | .0246 | | | | | | |

ARC97-019 IAB1 LVAP(ALL, SEALED) LEFT WING BOT. (RETL45)

ALPHA0 ( 6) = 3.403 BETA0 ( 2) = -.163

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0207 | | | | | | | | |
| .150 | | | | -.0224 | .0250 | .0572 | .0787 | | |
| .157 | | | | | | | | .0634 | |
| .163 | | .0988 | | | | | | | |
| .177 | | | .0322 | | | | | | |
| .229 | .0336 | | | | | | | | |
| .246 | | .0589 | | | | | | | |
| .250 | | | | .0112 | .0127 | .0451 | .0684 | | |
| .274 | | | .0262 | | | | | | |
| .345 | | | | | | | | .0559 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0146 | | | | | | | |
| .400 | | | | .0333 | .0143 | | .0526 | | |
| .402 | | | .1200 | | | | | | |
| .418 | | | | | | | | | -.0115 |
| .497 | .0100 | | | | | | | | |
| .503 | | | | | | | | .0391 | |
| .550 | | | | .1802 | .0695 | | | | |
| .565 | | | .1747 | | | | | | |
| .600 | | | | | | | .0228 | | |
| .637 | | .1832 | | | | | | | |
| .650 | | | | | | .0158 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2724 | | | | |
| .725 | | | | .3368 | | | | | |
| .730 | | | | | | | | | -.1314 |
| .750 | | | | | | .1376 | -.0265 | | |
| .760 | | | .2511 | | | | | | |
| .775 | | | | .3982 | .3643 | | | | |
| .798 | | .1376 | | | | | | | |
| .808 | | | .3041 | | | | | | |
| .834 | -.0538 | | | | | | | | |
| .839 | | .1376 | | | | | | | |
| .850 | | | | .2879 | .3084 | .1558 | | | |
| .[illegible] | | | .1587 | | | | | | |
| .[illegible] | | | | | | | | -.0770 | |
| .865 | .0083 | | | | | | | | |
| .879 | | .0552 | | | | | | | |
| .900 | -.0379 | | | .1673 | | | -.0542 | | |
| .905 | | | .0242 | | | | | | |
| .9[illegible] | | -.0357 | | | | | | | |
| .9[illegible] | | | | .0607 | .1088 | .1080 | | | |
| .9[illegible] | | | -.0425 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0724 | | | | | | | | |

ARC27-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL45)

ALPHAO( 6) = 3.403 BETAO ( 2) = -.183

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1849 | | -.1685 | | -.1498 | | |

ALPHAO( 6) = 3.408 BETAO ( 3) = 3.392

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1136 | -.0640 | .1945 | .5790 | .5718 | .5692 | .5965 | .0448 | |
| .010 | -.1129 | -.0444 | .2004 | .1446 | .0960 | .1637 | .2311 | | |
| .020 | -.1041 | -.0317 | .1774 | .0548 | .0857 | .0873 | .0856 | .0512 | |
| .040 | | -.0294 | .0836 | | | | | | |
| .050 | -.0917 | | | .0033 | .0294 | .0420 | .0568 | | |
| .069 | | | | | | | | .0360 | |
| .080 | | | | -.0013 | | | | | |
| .091 | | | .0319 | | | | | | |
| .086 | | -.0104 | | | | | | | |
| .094 | -.0613 | | | | | | | | |
| .150 | | | | -.0093 | .0027 | .0223 | .0428 | | |
| .157 | | | | | | | | .0282 | |
| .163 | | .0599 | | | | | | | |
| .177 | | | .0032 | | | | | | |
| .229 | -.0293 | | | | | | | | |
| .246 | | .0291 | | | | | | | |
| .250 | | | | .0043 | .0087 | .0220 | .0445 | | |
| .274 | | | .0206 | | | | | | |
| .345 | | | | | | | | .0232 | |
| .362 | .0300 | | | | | | | | |
| .390 | | .0611 | | | | | | | |
| .400 | | | | .1853 | .1105 | | .0333 | | |
| .402 | | | .1724 | | | | | | |
| .418 | | | | | | | | | -.0553 |
| .497 | .0226 | | | | | | | | |
| .503 | | | | | | | | .0097 | |
| .550 | | | | .2322 | .2321 | | | | |
| .565 | | | .2114 | | | | | | |
| .600 | | | | | | | .0401 | | |
| .637 | | .1708 | | | | | | | |
| .650 | | | | | | .1898 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0030 | | | | .2697 | | | | |
| .725 | | | | .2285 | | | | | |
| .730 | | | | | | | | | -.1692 |
| .750 | | | | | | .2152 | .1164 | | |

ARC97-019 IA81 LVAP(ALL W, SEALED) LEFT WING BOT. (RETL45)

ALPHA ( 6) = 3.406 BETA ( 3) = 3.392

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .0736 | | | | | | |
| .775 | | | | .2943 | .4012 | | | | |
| .798 | | -.0259 | | | | | | | |
| .808 | | | .0976 | | | | | | |
| .834 | -.1291 | | | | | | | | |
| .839 | | .0147 | | | | | | | |
| .850 | | | | .1246 | .2053 | .1614 | | | |
| .857 | | | .0026 | | | | | | |
| .862 | | | | | | | | -.0371 | |
| .865 | -.0886 | | | | | | | | |
| .879 | | -.0176 | | | | | | | |
| .900 | -.0691 | | | .0217 | | | .1157 | | |
| .905 | | | -.0715 | | | | | | |
| .919 | | -.0890 | | | | | | | |
| .950 | | | | -.0573 | -.0237 | .0599 | | | |
| .953 | | | -.1099 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0803 | | | | | | | | |
| 1.000 | | | -.1766 | | -.1457 | | -.1491 | | |

ALPHA0( 7) = 6.072 BETA0 ( 1) = -.153

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0634 | -.0150 | .3182 | .7632 | .7258 | .7315 | .7307 | .1302 | |
| .010 | -.0093 | .0140 | .3248 | .2659 | .2239 | .3173 | .3725 | | |
| .020 | .0039 | .0528 | .2841 | .1616 | .2532 | .2334 | .2215 | .1482 | |
| .040 | | .0624 | .1479 | | | | | | |
| .050 | .0302 | | | .0909 | .1415 | .1544 | .1827 | | |
| .060 | | | | | | | | .1313 | |
| .080 | | | | .0546 | | | | | |
| .090 | | | .0448 | | | | | | |
| .095 | | .0471 | | | | | | | |
| .100 | -.0221 | | | | | | | | |
| .150 | | | | .0170 | .0732 | .1129 | .1537 | | |
| .167 | | | | | | | | .1184 | |
| .190 | | .0958 | | | | | | | |
| .200 | | | .0548 | | | | | | |
| .219 | .0346 | | | | | | | | |
| .240 | | .0881 | | | | | | | |
| .300 | | | | .0431 | .0595 | .0987 | .1328 | | |
| .274 | | | .0821 | | | | | | |

ARC97-01S IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL45)

ALPHA0( 7) = 8.072 BETAC ( 1) = -.153

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .1018 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0367 | | | | | | | |
| .400 | | | | .0919 | .0612 | | .1086 | | |
| .402 | | | .1102 | | | | | | |
| .418 | | | | | | | | | -.0433 |
| .497 | .0207 | | | | | | | | |
| .503 | | | | | | | | .0778 | |
| .550 | | | | .3375 | .2595 | | | | |
| .565 | | | .2951 | | | | | | |
| .600 | | | | | | | .0761 | | |
| .637 | | .2828 | | | | | | | |
| .650 | | | | | | .2002 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3603 | | | | |
| .725 | | | | .3296 | | | | | |
| .730 | | | | | | | | | -.1939 |
| .750 | | | | | | .2636 | .0257 | | |
| .780 | | | .2390 | | | | | | |
| .775 | | | | .4228 | .4534 | | | | |
| .788 | | .1484 | | | | | | | |
| .808 | | | .2834 | | | | | | |
| .834 | -.0258 | | | | | | | | |
| .839 | | .1161 | | | | | | | |
| .850 | | | | .2468 | .3127 | .2639 | | | |
| .857 | | | .1205 | | | | | | |
| .862 | | | | | | | | -.0500 | |
| .865 | .0349 | | | | | | | | |
| .879 | | .0287 | | | | | | | |
| .900 | -.0348 | | | .1305 | | | .1289 | | |
| .905 | | | -.0123 | | | | | | |
| .919 | | -.0676 | | | | | | | |
| .950 | | | | .0519 | .0837 | .1412 | | | |
| .953 | | | -.0734 | | | | | | |
| .955 | | .0030 | | | | | | | |
| .965 | -.0911 | | | | | | | | |
| 1.000 | | | -.1789 | | -.1898 | | -.1381 | | |

ARC87-019 1A81 LVAR(ALLHL SEALED) LEFT WING BOT. (RETL46) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.550 RN/FT = 2.500
ELV-IB = 10.000 ELV-OB = -4.000
RUDDER = .000 SPDBRK = .000

ALPHAO( 1) = -0.268 BETAO ( 1) = .417

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0113 | -.0324 | .2052 | .4630 | .4351 | .4024 | .4286 | -.3694 | |
| .010 | .0217 | -.0609 | .0037 | -.2384 | -.3535 | -.2505 | -.2475 | | |
| .020 | .0220 | -.1005 | -.0601 | -.3455 | -.3907 | -.4014 | -.4000 | -.3677 | |
| .040 | | -.0717 | -.1745 | | | | | | |
| .050 | -.0570 | | | -.3393 | -.4103 | -.4369 | -.4347 | | |
| .069 | | | | | | | | -.3671 | |
| .080 | | | | -.3184 | | | | | |
| .081 | | | -.1039 | | | | | | |
| .086 | | -.0225 | | | | | | | |
| .094 | -.0011 | | | | | | | | |
| .150 | | | | -.2445 | -.3770 | -.3948 | -.3825 | | |
| .157 | | | | | | | | -.3674 | |
| .163 | | .0145 | | | | | | | |
| .177 | | | -.0947 | | | | | | |
| .229 | -.1561 | | | | | | | | |
| .246 | | -.0524 | | | | | | | |
| .250 | | | | -.1974 | -.3376 | -.3740 | -.3641 | | |
| .274 | | | -.1614 | | | | | | |
| .345 | | | | | | | | -.3234 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0501 | | | | | | | |
| .400 | | | | .0409 | -.0219 | | -.2943 | | |
| .402 | | | .0769 | | | | | | |
| .418 | | | | | | | | | -.2894 |
| .497 | -.0560 | | | | | | | | |
| .503 | | | | | | | | -.3264 | |
| .550 | | | | .1235 | .1067 | | | | |
| .565 | | | .1390 | | | | | | |
| .600 | | | | | | | -.2301 | | |
| .637 | | .1432 | | | | | | | |
| .650 | | | | | | .1143 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1393 | | | | |
| .725 | | | | .0783 | | | | | |
| .735 | | | | | | | | | -.2574 |
| .750 | | | | | | .0024 | -.2606 | | |
| .760 | | | -.0434 | | | | | | |
| .775 | | | | .2394 | .2115 | | | | |

ARC97-019 IAB1 LVAP(ALL HL SEALED) LEFT WING BOT. (RETL48)

ALPHAO( 1) = -6.268 BETAO ( 1) = .417

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .798 | | -.1427 | | | | | | | |
| .808 | | | .0534 | | | | | | |
| .834 | -.2001 | | | | | | | | |
| .839 | | .0094 | | | | | | | |
| .850 | | | | -.0159 | -.0173 | -.1303 | | | |
| .857 | | | -.0892 | | | | | | |
| .862 | | | | | | | | -.2571 | |
| .865 | -.0950 | | | | | | | | |
| .879 | | -.0974 | | | | | | | |
| .900 | -.1670 | | | -.1480 | | | -.1746 | | |
| .905 | | | -.1971 | | | | | | |
| .919 | | -.2275 | | | | | | | |
| .950 | | | | -.2498 | -.2315 | -.2234 | | | |
| .953 | | | -.2745 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2401 | | | | | | | | |
| 1.000 | | | -.3079 | | -.2321 | | -.2738 | | |

ALPHAO( 2) = -4.270 BETAO ( 1) = -3.851

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0360 | .0235 | .3142 | .6674 | .6095 | .5859 | .6059 | -.2560 | |
| .010 | .1034 | -.0044 | .1228 | -.1027 | -.2207 | -.1532 | -.1192 | | |
| .020 | .0792 | -.0599 | .0606 | -.2290 | -.2714 | -.3076 | -.3120 | -.3794 | |
| .040 | | -.0635 | .0230 | | | | | | |
| .050 | -.0148 | | | -.2457 | -.3033 | -.3403 | -.3434 | | |
| .069 | | | | | | | | -.3997 | |
| .080 | | | | -.2229 | | | | | |
| .081 | | | -.0372 | | | | | | |
| .086 | | .0426 | | | | | | | |
| .094 | .0481 | | | | | | | | |
| .150 | | | | -.2171 | -.2753 | -.2983 | -.3208 | | |
| .157 | | | | | | | | -.3873 | |
| .163 | | .1111 | | | | | | | |
| .177 | | | -.0812 | | | | | | |
| .222 | -.0802 | | | | | | | | |
| .246 | | -.1085 | | | | | | | |
| .250 | | | | -.1195 | -.2389 | -.2721 | -.2875 | | |
| .274 | | | -.1331 | | | | | | |
| .345 | | | | | | | | -.3844 | |
| .362 | .0000 | | | | | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL46)

ALPHA( 2) = -4.270 BETA0 ( 1) = -3.851

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .3390 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .390 | | -.0227 | | | | | | | |
| .400 | | | | .0474 | -.1465 | | -.2479 | | |
| .402 | | | .0913 | | | | | | |
| .418 | | | | | | | | | -.3479 |
| .497 | -.0213 | | | | | | | | |
| .503 | | | | | | | | -.3087 | |
| .550 | | | | .2337 | .2009 | | | | |
| .565 | | | .2358 | | | | | | |
| .600 | | | | | | | -.1284 | | |
| .637 | | .2554 | | | | | | | |
| .650 | | | | | | .1514 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2233 | | | | |
| .725 | | | | .1858 | | | | | |
| .730 | | | | | | | | | -.3695 |
| .750 | | | | | | .0897 | -.1853 | | |
| .760 | | | .0638 | | | | | | |
| .775 | | | | .3838 | .2719 | | | | |
| .798 | | -.0518 | | | | | | | |
| .808 | | | .1597 | | | | | | |
| .834 | -.1620 | | | | | | | | |
| .839 | | .0450 | | | | | | | |
| .850 | | | | .1025 | .0575 | -.0630 | | | |
| .857 | | | -.0220 | | | | | | |
| .862 | | | | | | | | -.2966 | |
| .865 | .0187 | | | | | | | | |
| .879 | | -.0411 | | | | | | | |
| .900 | -.0884 | | | -.0527 | | | -.0927 | | |
| .905 | | | -.1406 | | | | | | |
| .919 | | -.1395 | | | | | | | |
| .950 | | | | -.1853 | -.1699 | -.1790 | | | |
| .953 | | | -.2127 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2843 | | | | | | | | |
| 1.000 | | | -.2856 | | -.2458 | | -.2639 | | |

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

ARC97-019 TABLEVAPIALLHL SEALED) LEFT WING BOT. (RETL46)

ALPHA(0) = -4.251 BETA(0) = .391

SECTION 1:LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/B | .2990 | .3540 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/C | | | | | | | | | |
| .000 | -.0487 | -.0460 | .2322 | .5204 | .5071 | .4648 | .4811 | -.3229 | |
| .010 | -.0019 | -.0631 | .0503 | -.1540 | -.2810 | -.2094 | -.1805 | | |
| .020 | .0235 | -.1000 | -.0139 | -.2631 | -.3244 | -.3583 | -.3500 | -.3918 | |
| .043 | | -.0854 | -.1276 | | | | | | |
| .050 | -.0592 | | | -.2628 | -.3572 | -.3986 | -.3859 | | |
| .059 | | | | | | | | -.4029 | |
| .080 | | | | -.2554 | | | | | |
| .081 | | | -.0702 | | | | | | |
| .086 | | -.0114 | | | | | | | |
| .094 | .0056 | | | | | | | | |
| .150 | | | | -.2070 | -.3135 | -.3351 | -.3562 | | |
| .157 | | | | | | | | -.3983 | |
| .163 | | .0193 | | | | | | | |
| .177 | | | -.0650 | | | | | | |
| .189 | -.1431 | | | | | | | | |
| .246 | | -.0386 | | | | | | | |
| .250 | | | | -.1814 | -.2765 | -.3230 | -.3033 | | |
| .274 | | | -.1575 | | | | | | |
| .345 | | | | | | | | -.3624 | |
| .352 | .0000 | | | | | | | | |
| .390 | | -.0495 | | | | | | | |
| .400 | | | | .0929 | .0980 | | -.2433 | | |
| .402 | | | .1131 | | | | | | |
| .418 | | | | | | | | | -.3780 |
| .497 | -.0497 | | | | | | | | |
| .503 | | | | | | | | -.3020 | |
| .550 | | | | .2072 | .1935 | | | | |
| .565 | | | .2057 | | | | | | |
| .600 | | | | | | | -.1007 | | |
| .637 | | .2003 | | | | | | | |
| .650 | | | | | | .1808 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1801 | | | | |
| .725 | | | | .1219 | | | | | |
| .730 | | | | | | | | | -.2069 |
| .750 | | | | | | .0203 | .0405 | | |
| .760 | | | -.0154 | | | | | | |
| .775 | | | | .2854 | .2706 | | | | |
| .798 | | -.1378 | | | | | | | |
| .809 | | | .0832 | | | | | | |
| .934 | -.2118 | | | | | | | | |
| .939 | | -.0212 | | | | | | | |
| .950 | | | | .0141 | .0084 | -.1131 | | | |
| .957 | | | -.0873 | | | | | | |
| .962 | | | | | | | | -.2717 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL46)

ALPHA( 2) = -4.251 BETAO ( 2) = .391

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.0852 | | | | | | | | |
| .879 | | -.0885 | | | | | | | |
| .900 | -.1535 | | | -.1318 | | | -.1503 | | |
| .905 | | | -.1888 | | | | | | |
| .919 | | -.2129 | | | | | | | |
| .950 | | | | -.2421 | -.2394 | -.2147 | | | |
| .953 | | | -.2638 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2528 | | | | | | | | |
| 1.000 | | | -.3098 | | -.2368 | | -.2531 | | |

ALPHA0( 2) = -4.215 BETAO ( 3) = 3.923

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1003 | -.0918 | .1858 | .1248 | .4478 | .4357 | .4848 | -.1253 | |
| .010 | -.0887 | -.0809 | .0755 | -.2375 | -.3153 | -.2205 | -.1708 | | |
| .020 | -.0870 | -.0518 | .0339 | -.3408 | -.3539 | -.2181 | -.1739 | -.1256 | |
| .040 | | -.0432 | -.0943 | | | | | | |
| .050 | -.1138 | | | -.2963 | -.3392 | -.1969 | -.1683 | | |
| .069 | | | | | | | | -.1109 | |
| .080 | | | | -.2870 | | | | | |
| .081 | | | -.1097 | | | | | | |
| .086 | | -.0425 | | | | | | | |
| .094 | -.0962 | | | | | | | | |
| .150 | | | | -.0894 | -.1418 | -.1781 | -.1403 | | |
| .157 | | | | | | | | -.1034 | |
| .193 | | -.0571 | | | | | | | |
| .197 | | | -.0171 | | | | | | |
| .229 | -.0828 | | | | | | | | |
| .245 | | .0114 | | | | | | | |
| .251 | | | | .2819 | .2255 | -.1129 | -.0982 | | |
| .274 | | | .0842 | | | | | | |
| .345 | | | | | | | | -.1387 | |
| .382 | .0000 | | | | | | | | |
| .390 | | .1065 | | | | | | | |
| .401 | | | | .2323 | .1457 | | -.0982 | | |
| .432 | | | .2584 | | | | | | |
| .498 | | | | | | | | | -.0789 |
| .497 | .0535 | | | | | | | | |
| .503 | | | | | | | | -.1034 | |
| .550 | | | | .1143 | .0788 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL48)

ALPHAO( 2) = -4.215 BETAO ( 3) = 3.923

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .9870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .1527 | | | | | | |
| .600 | | | | | | | -.0583 | | |
| .637 | | .1489 | | | | | | | |
| .650 | | | | | | .1882 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1268 | | | | |
| .725 | | | | .0035 | | | | | |
| .730 | | | | | | | | | -.1028 |
| .750 | | | | | | -.0239 | -.0024 | | |
| .760 | | | -.1352 | | | | | | |
| .775 | | | | .1578 | .1871 | | | | |
| .798 | | -.1437 | | | | | | | |
| .808 | | | .0239 | | | | | | |
| .834 | -.1574 | | | | | | | | |
| .839 | | -.0098 | | | | | | | |
| .850 | | | | -.0561 | -.0563 | -.1847 | | | |
| .857 | | | -.0855 | | | | | | |
| .862 | | | | | | | | | |
| .895 | -.0788 | | | | | | | -.1880 | |
| .897 | | -.1884 | | | | | | | |
| .900 | -.1330 | | | -.1808 | | | -.2015 | | |
| .905 | | | -.1920 | | | | | | |
| .919 | | -.2085 | | | | | | | |
| .950 | | | | -.2587 | -.2484 | -.2459 | | | |
| .953 | | | -.2647 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1351 | | | | | | | | |
| 1.000 | | | -.2240 | | -.2618 | | -.2244 | | |

ALPHAO( 3) = -2.110 BETAO ( 1) = .382

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .9870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0581 | -.0739 | .2387 | .5810 | .5469 | .5429 | .5533 | -.2364 | |
| .010 | -.0185 | -.0825 | .0962 | -.1058 | -.2101 | -.1458 | -.0925 | | |
| .020 | .0009 | -.1005 | .0390 | -.2195 | -.2609 | -.2803 | -.2742 | -.2881 | |
| .040 | | -.0840 | .0550 | | | | | | |
| .050 | -.0707 | | | -.2059 | -.2842 | -.3075 | -.3017 | | |
| .069 | | | | | | | | | |
| .080 | | | | -.1977 | | | | -.2860 | |
| .081 | | | -.0621 | | | | | | |
| .086 | | -.0169 | | | | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL48)

ALPHAC( 3) = -2.110 BETAC( 1) = .382

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | .0191 | | | | | | | | |
| .150 | | | | -.0998 | -.2161 | -.2483 | -.2755 | | |
| .157 | | | | | | | | -.2777 | |
| .163 | | .0693 | | | | | | | |
| .177 | | | -.0263 | | | | | | |
| .229 | -.1486 | | | | | | | | |
| .246 | | -.0295 | | | | | | | |
| .250 | | | | -.1499 | -.1388 | -.2137 | -.2205 | | |
| .274 | | | -.1111 | | | | | | |
| .345 | | | | | | | | -.2235 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0095 | | | | | | | |
| .400 | | | | .2256 | .1791 | | -.1761 | | |
| .402 | | | .1877 | | | | | | |
| .418 | | | | | | | | | -.2530 |
| .497 | .0383 | | | | | | | | |
| .503 | | | | | | | | -.0327 | |
| .550 | | | | .2564 | .2934 | | | | |
| .555 | | | .2589 | | | | | | |
| .600 | | | | | | | .1742 | | |
| .637 | | .2457 | | | | | | | |
| .650 | | | | | | .2412 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1994 | | | | |
| .724 | | | | .1440 | | | | | |
| .730 | | | | | | | | | -.1101 |
| .750 | | | | | | .0394 | .0598 | | |
| .760 | | | .0092 | | | | | | |
| .775 | | | | .3262 | .2782 | | | | |
| .798 | | -.1082 | | | | | | | |
| .808 | | | .0889 | | | | | | |
| .824 | -.2155 | | | | | | | | |
| .839 | | -.0212 | | | | | | | |
| .850 | | | | .0339 | .0118 | -.1049 | | | |
| .857 | | | -.0804 | | | | | | |
| .862 | | | | | | | | -.1470 | |
| .865 | -.0810 | | | | | | | | |
| .874 | | -.1009 | | | | | | | |
| .900 | -.1378 | | | -.1180 | | | -.1508 | | |
| .909 | | | -.1997 | | | | | | |
| .919 | | -.2033 | | | | | | | |
| .928 | | | | -.2358 | -.2327 | -.2095 | | | |
| .933 | | | -.2656 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2658 | | | | | | | | |

ARC97-019 IA81 LVAR(ALLHL SEALED) LEFT WING BOT. (RETL+6)

ALPHAO( 1) = -2.110 BETAO ( 1) = .382

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.3091 | | -.2460 | | -.2669 | | |

ALPHAO( 4) = -.014 BETAO ( 1) = -5.856

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0661 | .0626 | .3735 | .7708 | .7477 | .7300 | .7382 | -.0267 | |
| .010 | .0292 | .0572 | .2679 | .0710 | -.0475 | .0015 | .1008 | | |
| .020 | .0260 | -.0032 | .2000 | -.0594 | -.0790 | -.1066 | -.1317 | -.0997 | |
| .040 | | -.0035 | .0861 | | | | | | |
| .050 | .0644 | | | -.0427 | -.0882 | -.1287 | -.1510 | | |
| .069 | | | | | | | | -.1223 | |
| .080 | | | | -.0818 | | | | | |
| .081 | | | .0472 | | | | | | |
| .086 | | .1089 | | | | | | | |
| .094 | .1483 | | | | | | | | |
| .150 | | | | -.0616 | -.0898 | -.0886 | -.1040 | | |
| .157 | | | | | | | | -.0809 | |
| .163 | | .1535 | | | | | | | |
| .177 | | | .0323 | | | | | | |
| .229 | -.0346 | | | | | | | | |
| .246 | | -.0574 | | | | | | | |
| .250 | | | | -.0056 | -.0319 | -.0242 | -.0467 | | |
| .274 | | | -.0326 | | | | | | |
| .345 | | | | | | | | -.0529 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0815 | | | | | | | |
| .400 | | | | .3457 | .2369 | | .0272 | | |
| .402 | | | .2959 | | | | | | |
| .418 | | | | | | | | | -.0650 |
| .497 | .0782 | | | | | | | | |
| .503 | | | | | | | | .1146 | |
| .550 | | | | .4783 | .4791 | | | | |
| .565 | | | .4950 | | | | | | |
| .600 | | | | | | | .2686 | | |
| .637 | | .5105 | | | | | | | |
| .650 | | | | | | .3873 | | | |
| 670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2870 | | | | |
| .725 | | | | .2546 | | | | | |
| .736 | | | | | | | | | -.0482 |
| .750 | | | | | | .1037 | .0707 | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL46)

ALPHA( W) = -.014 BETA0 ( 1) = -5.856

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .1290 | | | | | | |
| .775 | | | | .4830 | .3556 | | | | |
| .798 | | .0101 | | | | | | | |
| .808 | | | .2565 | | | | | | |
| 834 | -.1290 | | | | | | | | |
| 839 | | .0911 | | | | | | | |
| .850 | | | | .1711 | .1009 | -.0461 | | | |
| .857 | | | .0517 | | | | | | |
| .862 | | | | | | | | -.0631 | |
| .865 | .0308 | | | | | | | | |
| .879 | | -.0163 | | | | | | | |
| .900 | -.0465 | | | -.0125 | | | -.0955 | | |
| .905 | | | -.1096 | | | | | | |
| 919 | | -.1119 | | | | | | | |
| .950 | | | | -.1569 | -.1300 | -.1491 | | | |
| 953 | | | -.1942 | | | | | | |
| .955 | | .0030 | | | | | | | |
| .965 | -.2230 | | | | | | | | |
| 1.000 | | | -.2661 | | -.3236 | | -.2452 | | |

ALPHA0( W) = -.012 BETA0 ( 2) = -3.894

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0277 | .0145 | .3402 | .7245 | .7108 | .6818 | .6943 | -.0537 | |
| .010 | .1117 | .0295 | .2661 | .0376 | -.0719 | -.0254 | .0590 | | |
| .020 | .1158 | .0202 | 2450 | -.0881 | -.1090 | -.1287 | -.1511 | -.1195 | |
| .040 | | .0498 | .1370 | | | | | | |
| .050 | .0157 | | | -.0783 | -.1192 | -.1514 | -.1698 | | |
| .069 | | | | | | | | -.1381 | |
| .080 | | | | -.1113 | | | | | |
| .081 | | | -.0158 | | | | | | |
| .086 | | .0538 | | | | | | | |
| .094 | .0657 | | | | | | | | |
| .100 | | | | -.1148 | -.1097 | -.1078 | -.1298 | | |
| .157 | | | | | | | | -.1058 | |
| .163 | | .1460 | | | | | | | |
| .177 | | | -.0283 | | | | | | |
| .229 | .0132 | | | | | | | | |
| 246 | | -.0957 | | | | | | | |
| .250 | | | | -.0244 | - 0834 | -.0818 | -.0711 | | |
| .274 | | | -.0556 | | | | | | |

ARC97-019 TA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL48)

ALPHA(W) = -.012 BETA0 ( Z) = 3.894

SECTION 1 LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/Bw | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/Cw | | | | | | | | | |
| .345 | | | | | | | | -.0853 | |
| .362 | .0300 | | | | | | | | |
| .390 | | .0542 | | | | | | | |
| .400 | | | | .2748 | .0687 | | -.0018 | | |
| .402 | | | .2478 | | | | | | |
| .418 | | | | | | | | | -.0955 |
| .497 | .0090 | | | | | | | | |
| .503 | | | | | | | | .0514 | |
| .550 | | | | .4478 | .4756 | | | | |
| .565 | | | .4315 | | | | | | |
| .600 | | | | | | | .2085 | | |
| .637 | | .4327 | | | | | | | |
| .650 | | | | | | .3706 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0307 | | | | .2722 | | | | |
| .725 | | | | .2431 | | | | | |
| .730 | | | | | | | | | -.0723 |
| .750 | | | | | | .0982 | .0608 | | |
| .760 | | | .1143 | | | | | | |
| .775 | | | | .4523 | .3533 | | | | |
| .798 | | -.0059 | | | | | | | |
| .808 | | | .2259 | | | | | | |
| .834 | -.1840 | | | | | | | | |
| .839 | | .0583 | | | | | | | |
| .850 | | | | .1510 | .0848 | -.0618 | | | |
| .857 | | | .0302 | | | | | | |
| .862 | | | | | | | | -.0756 | |
| .865 | -.0175 | | | | | | | | |
| .879 | | -.0781 | | | | | | | |
| .900 | -.0674 | | | -.0198 | | | -.1014 | | |
| .905 | | | -.1252 | | | | | | |
| .919 | | -.1217 | | | | | | | |
| .950 | | | | -.1638 | -.1407 | -.1637 | | | |
| .953 | | | -.2271 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2898 | | | | | | | | |
| 1.000 | | | -.2802 | | -.3088 | | -.2810 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL48)

ALPHA0( 4) = -.017 BETA0 ( 3) = -1.729

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .8990 | .3840 | .4870 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0368 | -.0470 | .3049 | .6681 | .6659 | .6458 | .6494 | -.0918 | |
| .010 | .0582 | .0095 | .2394 | -.0019 | -.0953 | -.0502 | .0468 | | |
| .020 | .0411 | .0450 | .2081 | -.1218 | -.1422 | -.1554 | -.1687 | -.1489 | |
| .040 | | .0462 | .0814 | | | | | | |
| .050 | -.0360 | | | -.1059 | -.1536 | -.1859 | -.1889 | | |
| .059 | | | | | | | | -.1524 | |
| .080 | | | | -.1381 | | | | | |
| .081 | | | -.0551 | | | | | | |
| .086 | | -.0035 | | | | | | | |
| .094 | .0138 | | | | | | | | |
| .150 | | | | -.0686 | -.1105 | -.1328 | -.1524 | | |
| .157 | | | | | | | | -.1260 | |
| .183 | | .1030 | | | | | | | |
| .177 | | | .0138 | | | | | | |
| .229 | -.0019 | | | | | | | | |
| .246 | | .0135 | | | | | | | |
| .250 | | | | -.0318 | -.0785 | -.0937 | -.0926 | | |
| .274 | | | -.0603 | | | | | | |
| .345 | | | | | | | | -.0713 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0195 | | | | | | | |
| .400 | | | | .2718 | .2481 | | -.0050 | | |
| .402 | | | .2513 | | | | | | |
| .418 | | | | | | | | | -.1042 |
| .497 | .0067 | | | | | | | | |
| .503 | | | | | | | | .0771 | |
| .550 | | | | .4095 | .4357 | | | | |
| .565 | | | .3398 | | | | | | |
| .600 | | | | | | | .2320 | | |
| .631 | | .3282 | | | | | | | |
| .650 | | | | | | .3380 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2494 | | | | |
| .705 | | | | .2074 | | | | | |
| .730 | | | | | | | | | -.1033 |
| .750 | | | | | | .0753 | .0674 | | |
| .760 | | | .0800 | | | | | | |
| .775 | | | | .3982 | .3284 | | | | |
| .799 | | -.0258 | | | | | | | |
| .805 | | | .1325 | | | | | | |
| .834 | -.1649 | | | | | | | | |
| .839 | | .0448 | | | | | | | |
| .850 | | | | .1065 | .0589 | -.0834 | | | |
| .857 | | | -.0094 | | | | | | |
| .882 | | | | | | | | -.0920 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL48)

ALPHAO( 4) = -.017 BETAO ( 3) = -1.729

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | .0219 | | | | | | | | |
| .879 | | -.0488 | | | | | | | |
| .900 | -.0852 | | | -.0560 | | | -.1247 | | |
| .905 | | | -.1375 | | | | | | |
| .919 | | -.1502 | | | | | | | |
| .950 | | | | -.1745 | -.1749 | -.1889 | | | |
| .953 | | | -.2068 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2671 | | | | | | | | |
| 1.000 | | | -.2916 | | -.2871 | | -.2770 | | |

ALPHAO( 4) = -.608 BETAO ( 4) = .358

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0703 | -.1019 | .2543 | .6168 | .6197 | .5977 | .6014 | -.1311 | |
| .010 | -.0219 | -.0968 | .1867 | -.0209 | -.1196 | -.0773 | .0035 | | |
| .020 | .0212 | -.0602 | .2140 | -.1309 | -.1669 | -.1844 | -.1950 | -.1704 | |
| .040 | | -.0195 | .1033 | | | | | | |
| .050 | -.0702 | | | -.1126 | -.1685 | -.1998 | -.2179 | | |
| .069 | | | | | | | | -.1414 | |
| .080 | | | | -.1287 | | | | | |
| .081 | | | -.0488 | | | | | | |
| .086 | | -.0153 | | | | | | | |
| .094 | 0195 | | | | | | | | |
| .150 | | | | -.0206 | -.1129 | -.1655 | | | |
| .157 | | | | | | | | -.1240 | |
| .163 | | .0944 | | | | | | | |
| .177 | | | .0090 | | | | | | |
| .229 | -.0863 | | | | | | | | |
| .246 | | .0044 | | | | | | | |
| .250 | | | | -.0588 | -.0719 | -.0898 | -.1227 | | |
| .274 | | | .0795 | | | | | | |
| .345 | | | | | | | | .0281 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1478 | | | | | | | |
| .400 | | | | .2693 | .2478 | | .0529 | | |
| .402 | | | .2671 | | | | | | |
| .418 | | | | | | | | | -.0598 |
| .497 | .0820 | | | | | | | | |
| .503 | | | | | | | | .0877 | |
| .550 | | | | .2985 | .4112 | | | | |

ARC97-01B IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL46)

ALPHA0( 4) = -.006 BETA0 ( 4) = .358

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .2872 | | | | | | |
| .800 | | | | | | | .3221 | | |
| .637 | | .2782 | | | | | | | |
| .650 | | | | | | .3025 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2198 | | | | |
| .725 | | | | .1564 | | | | | |
| .730 | | | | | | | | | -.2127 |
| .750 | | | | | | .0466 | .0455 | | |
| .760 | | | .0401 | | | | | | |
| .775 | | | | .3476 | .2987 | | | | |
| .798 | | -.0879 | | | | | | | |
| .808 | | | .0976 | | | | | | |
| .834 | -.2287 | | | | | | | | |
| .839 | | -.0169 | | | | | | | |
| .850 | | | | .0565 | .0238 | -.1099 | | | |
| .857 | | | -.0679 | | | | | | |
| .862 | | | | | | | | -.1190 | |
| .865 | -.0563 | | | | | | | | |
| .879 | | -.1187 | | | | | | | |
| .900 | -.1284 | | | -.1043 | | | -.1591 | | |
| .905 | | | -.1953 | | | | | | |
| .919 | | -.2033 | | | | | | | |
| .950 | | | | -.2288 | -.2165 | -.2114 | | | |
| .953 | | | -.2683 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2898 | | | | | | | | |
| 1.000 | | | -.3128 | | -.2566 | | -.2864 | | |

ALPHA0( 4) = .002 BETA0 ( 5) = 2.458

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0981 | -.1412 | .2649 | .5889 | .5555 | .5472 | .6545 | -.0382 | |
| .010 | -.0603 | -.1143 | .2334 | -.0396 | -.1478 | -.1017 | .0410 | | |
| .020 | -.0206 | -.0732 | .1934 | -.1534 | -.1835 | -.2033 | -.1716 | -.0084 | |
| .040 | | -.0504 | .0520 | | | | | | |
| .050 | -.0778 | | | -.1290 | -. 904 | -.1999 | -.1751 | | |
| .070 | | | | | | | | -.0100 | |
| .080 | | | | -.1003 | | | | | |
| .081 | | | -.0559 | | | | | | |
| .088 | | -.0191 | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL48)

ALPHA0( 4) = .002 BETA0 ( 5) = 2.458

SECTION . 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0411 | | | | | | | | |
| .150 | | | | -.0271 | -.0828 | -.1157 | -.0699 | | |
| .157 | | | | | | | | .0185 | |
| .163 | | .0273 | | | | | | | |
| .177 | | | .0330 | | | | | | |
| .229 | -.0452 | | | | | | | | |
| .246 | | .0301 | | | | | | | |
| .250 | | | | .1910 | .2331 | .1627 | .1878 | | |
| .274 | | | .1759 | | | | | | |
| .345 | | | | | | | | .2571 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1782 | | | | | | | |
| .400 | | | | .2194 | .1813 | | .2073 | | |
| .402 | | | .2409 | | | | | | |
| .418 | | | | | | | | | .0342 |
| .497 | .1056 | | | | | | | | |
| .503 | | | | | | | | .2565 | |
| .550 | | | | .2185 | .3844 | | | | |
| .565 | | | .2143 | | | | | | |
| .600 | | | | | | | .3182 | | |
| .637 | | .1988 | | | | | | | |
| .650 | | | | | | .3206 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2291 | | | | |
| .725 | | | | .1048 | | | | | |
| .730 | | | | | | | | | -.2351 |
| .750 | | | | | | .0545 | .0358 | | |
| .760 | | | -.0492 | | | | | | |
| .775 | | | | .3127 | .2949 | | | | |
| .798 | | -.1628 | | | | | | | |
| .808 | | | .0545 | | | | | | |
| .834 | -.1881 | | | | | | | | |
| .839 | | -.0258 | | | | | | | |
| .850 | | | | .0344 | .0133 | -.1125 | | | |
| .857 | | | -.0998 | | | | | | |
| .862 | | | | | | | | -.1518 | |
| .865 | -.0724 | | | | | | | | |
| .879 | | -.1078 | | | | | | | |
| .900 | -.1548 | | | -.1219 | | | -.1673 | | |
| .905 | | | -.1781 | | | | | | |
| .919 | | -.2295 | | | | | | | |
| .950 | | | | -.2413 | -.2152 | -.2157 | | | |
| .953 | | | -.2479 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2145 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (PETL46)

ALPHAO( 4) = .002 BETAO ( 5) = 2.458

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.2842 | | -.2394 | | -.2697 | | |

ALPHAO( 4) = .017 BETAO ( 6) = 3.895

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1198 | -.1315 | .2414 | .5742 | .6470 | .6053 | .6070 | .0051 | |
| .010 | -.0939 | -.1043 | .2266 | .0932 | .0846 | .0395 | .0836 | | |
| .020 | -.0837 | -.0785 | .2073 | .0792 | .1157 | .0176 | -.0899 | .0211 | |
| .040 | | -.0684 | .1746 | | | | | | |
| .050 | -.0843 | | | .0873 | .0842 | .0660 | -.0271 | | |
| .069 | | | | | | | | .0067 | |
| .080 | | | | .1736 | | | | | |
| .081 | | | .1422 | | | | | | |
| .086 | | -.0151 | | | | | | | |
| .094 | -.0786 | | | | | | | | |
| .150 | | | | .3061 | .1972 | .1320 | .0785 | | |
| .157 | | | | | | | | .0071 | |
| .163 | | .1200 | | | | | | | |
| .177 | | | .1359 | | | | | | |
| .229 | -.0254 | | | | | | | | |
| .246 | | .1379 | | | | | | | |
| .250 | | | | .1919 | .1408 | .1081 | .0781 | | |
| .274 | | | .3001 | | | | | | |
| .345 | | | | | | | | .0771 | |
| .362 | .0000 | | | | | | | | |
| .380 | | .2611 | | | | | | | |
| .400 | | | | .2205 | .2220 | | .1088 | | |
| .402 | | | .2362 | | | | | | |
| .418 | | | | | | | | | -.0758 |
| .497 | .1791 | | | | | | | | |
| .503 | | | | | | | | .1860 | |
| .550 | | | | .2305 | .3082 | | | | |
| .565 | | | .2104 | | | | | | |
| .600 | | | | | | | .2275 | | |
| .637 | | .1874 | | | | | | | |
| .650 | | | | | | .2224 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1247 | | | | |
| .705 | | | | .0552 | | | | | |
| .730 | | | | | | | | | -.2682 |
| .750 | | | | | | -.0166 | -.0220 | | |

AR097-019 IA91 LVAPIALLHL SEALED) LEFT WING BOT. (RETL48)

ALPHA0( 4) = .017 BETA0 ( 6) = 3.895

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | -.1032 | | | | | | |
| .775 | | | | | .2159 | .2192 | | | |
| .798 | | -.1512 | | | | | | | |
| .808 | | | .0326 | | | | | | |
| .834 | -.1324 | | | | | | | | |
| .839 | | -.0048 | | | | | | | |
| .850 | | | | | -.0364 | -.0367 | -.1709 | | |
| .857 | | | -.0916 | | | | | | |
| .862 | | | | | | | | -.1987 | |
| .865 | -.0607 | | | | | | | | |
| .879 | | -.1318 | | | | | | | |
| .900 | -.1474 | | | | -.1567 | | -.2107 | | |
| .905 | | | -.2075 | | | | | | |
| .919 | | -.2284 | | | | | | | |
| .950 | | | | | -.2672 | -.2525 | -.2609 | | |
| .953 | | | -.2828 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1983 | | | | | | | | |
| 1.000 | | | -.2527 | | -.2803 | | -.2884 | | |

ALPHA0( 4) = .028 BETA0 ( 7) = 6.318

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1694 | -.0217 | .3090 | .5983 | .5685 | .5069 | .5473 | -.0074 | |
| .010 | -.1528 | -.0013 | .3290 | .0838 | -.0129 | -.0515 | .0229 | | |
| .020 | -.1368 | .0348 | .3076 | .0712 | .0327 | -.0849 | -.1491 | .0078 | |
| .040 | | .0443 | .2233 | | | | | | |
| .050 | -.1090 | | | .0846 | .0120 | -.0301 | -.0731 | | |
| .069 | | | | | | | | -.0018 | |
| .080 | | | | .1759 | | | | | |
| .081 | | | .1471 | | | | | | |
| .088 | | .0578 | | | | | | | |
| .094 | -.1285 | | | | | | | | |
| .150 | | | | .1449 | .1423 | .1024 | .0881 | | |
| .157 | | | | | | | | .0449 | |
| .183 | | .1935 | | | | | | | |
| .177 | | | .2183 | | | | | | |
| .229 | .0849 | | | | | | | | |
| .248 | | .1448 | | | | | | | |
| .250 | | | | .2191 | .1420 | .1177 | .1086 | | |
| .274 | | | .2383 | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL48)

ALPHAC ( 4) = .028 BETAO ( 7) = 6.518

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/SW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .8720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .1721 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .2545 | | | | | | | |
| .400 | | | | .2191 | .2003 | | .1881 | | |
| .402 | | | .2553 | | | | | | |
| .418 | | | | | | | | | -.0861 |
| .497 | .2284 | | | | | | | | |
| .503 | | | | | | | | .1256 | |
| .550 | | | | .1899 | .2684 | | | | |
| .565 | | | .1987 | | | | | | |
| .600 | | | | | | | .1865 | | |
| .637 | | .1917 | | | | | | | |
| .650 | | | | | | .1883 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1045 | | | | |
| .725 | | | | .0068 | | | | | |
| .730 | | | | | | | | | -.3078 |
| .750 | | | | | | -.0487 | -.0645 | | |
| .760 | | | -.1327 | | | | | | |
| .775 | | | | .1588 | .1916 | | | | |
| .798 | | -.1440 | | | | | | | |
| .808 | | | .0302 | | | | | | |
| .834 | -.1420 | | | | | | | | |
| .839 | | .0044 | | | | | | | |
| .850 | | | | -.0484 | -.0668 | -.2019 | | | |
| .857 | | | -.0941 | | | | | | |
| .862 | | | | | | | | -.2473 | |
| .865 | -.0543 | | | | | | | | |
| .879 | | -.1349 | | | | | | | |
| .900 | -.1265 | | | -.1694 | | | -.2448 | | |
| .905 | | | -.2155 | | | | | | |
| .919 | | -.2163 | | | | | | | |
| .950 | | | | -.2672 | -.2677 | -.2858 | | | |
| .953 | | | -.2858 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .955 | -.1671 | | | | | | | | |
| 1.000 | | | -.2148 | | -.2833 | | -.3031 | | |

ARC97-019 TAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL48)

ALPHA01 ( ) = 2.074 BETA0 ( ) = .382

SECTION 11LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0919 | -.1165 | .3098 | .6565 | .6633 | .6354 | .6373 | .0250 | |
| .010 | -.0439 | -.0474 | .3289 | .0815 | .0235 | .0535 | .1290 | | |
| .020 | .0237 | -.0018 | .2878 | .0460 | .0821 | -.0265 | -.0811 | .0499 | |
| .040 | | .0085 | .1234 | | | | | | |
| .050 | -.0591 | | | -.0152 | -.0467 | -.0632 | -.0786 | | |
| .069 | | | | | | | | .0569 | |
| .080 | | | | -.0074 | | | | | |
| .081 | | | -.0191 | | | | | | |
| .086 | | -.0235 | | | | | | | |
| .094 | .0386 | | | | | | | | |
| .150 | | | | .0044 | .0216 | .0138 | .0024 | | |
| .157 | | | | | | | | .0938 | |
| .163 | | .1069 | | | | | | | |
| .177 | | | .0257 | | | | | | |
| .229 | .0456 | | | | | | | | |
| .246 | | .1072 | | | | | | | |
| .250 | | | | .1787 | .2027 | .2071 | .1370 | | |
| .274 | | | .2176 | | | | | | |
| .345 | | | | | | | | .2823 | |
| .362 | .0009 | | | | | | | | |
| .390 | | .2573 | | | | | | | |
| .400 | | | | .3025 | .2888 | | .2772 | | |
| .402 | | | .3208 | | | | | | |
| .418 | | | | | | | | | -.0900 |
| .497 | .1778 | | | | | | | | |
| .503 | | | | | | | | .2311 | |
| .550 | | | | .3490 | .4818 | | | | |
| .565 | | | .3186 | | | | | | |
| .600 | | | | | | | .2937 | | |
| .637 | | .3154 | | | | | | | |
| .650 | | | | | | .3054 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0300 | | | | .2190 | | | | |
| .725 | | | | .1758 | | | | | |
| .730 | | | | | | | | | -.4143 |
| .750 | | | | | | .0497 | .0193 | | |
| .760 | | | .0527 | | | | | | |
| .775 | | | | .3738 | .3150 | | | | |
| .798 | | -.0722 | | | | | | | |
| .808 | | | .1057 | | | | | | |
| .834 | -.2143 | | | | | | | | |
| .839 | | -.0088 | | | | | | | |
| .850 | | | | .0734 | .0320 | -.1129 | | | |
| .857 | | | -.0589 | | | | | | |
| 862 | | | | | | | | -.1841 | |

ARC97-0'9 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL46)

PHAS( 5) = 2.07+ BETAO ( 1) = .362

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.0366 | | | | | | | | |
| .879 | | -.1071 | | | | | | | |
| .900 | -.1105 | | | -.0983 | | | -.1794 | | |
| .905 | | | -.1875 | | | | | | |
| .919 | | -.1902 | | | | | | | |
| .950 | | | | -.2226 | -.2068 | -.2148 | | | |
| .953 | | | -.2612 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2809 | | | | | | | | |
| 1.000 | | | -.3091 | | -.2898 | | -.3153 | | |

ALPHAO( 6) = 3.563 BETAO ( 1) = -3.860

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0170 | -.0165 | .3708 | .7513 | .7596 | .7461 | .7463 | .1703 | |
| .010 | .0315 | .0118 | .4098 | .2290 | .2241 | .2476 | .2906 | | |
| .020 | .0768 | .0067 | .3939 | .1726 | .2210 | .1587 | .1114 | .2062 | |
| .040 | | .0696 | .2313 | | | | | | |
| .050 | .0153 | | | .0554 | .0569 | .0800 | .0959 | | |
| .069 | | | | | | | | .2132 | |
| .080 | | | | .0225 | | | | | |
| .081 | | | .0731 | | | | | | |
| .088 | | .1004 | | | | | | | |
| .094 | .0851 | | | | | | | | |
| .150 | | | | .1127 | .1030 | .122* | .1719 | | |
| .157 | | | | | | | | .2597 | |
| .163 | | .2261 | | | | | | | |
| .177 | | | .1223 | | | | | | |
| .229 | .0365 | | | | | | | | |
| .245 | | .1488 | | | | | | | |
| .252 | | | | .0452 | .1654 | .1969 | .2180 | | |
| .254 | | | .0753 | | | | | | |
| .345 | | | | | | | | .2912 | |
| .362 | .0000 | | | | | | | | |
| .372 | | .1261 | | | | | | | |
| .400 | | | | .4768 | .5381 | | .4737 | | |
| .402 | | | .4430 | | | | | | |
| .418 | | | | | | | | | -.1733 |
| .497 | .1165 | | | | | | | | |
| .503 | | | | | | | | .2349 | |
| .550 | | | | .4998 | .4734 | | | | |

ARC97-019 TAB: CVAP(ALLHL SEALED) LEFT WING BOT. (RETL48)

ALPHAO( 5) = 3.563 BETAO ( 1) = -3.880

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .585 | | | .4893 | | | | | | |
| .600 | | | | | | | .3026 | | |
| .637 | | .4934 | | | | | | | |
| .650 | | | | | | .3336 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2535 | | | | |
| .725 | | | | .2424 | | | | | |
| .730 | | | | | | | | | -.4749 |
| .750 | | | | | | .0720 | .0263 | | |
| .760 | | | .1178 | | | | | | |
| .775 | | | | .4785 | .3879 | | | | |
| .798 | | .0026 | | | | | | | |
| .808 | | | .2269 | | | | | | |
| .834 | -.1399 | | | | | | | | |
| .839 | | .0643 | | | | | | | |
| .850 | | | | .1533 | .0868 | -.0828 | | | |
| .857 | | | .0270 | | | | | | |
| .862 | | | | | | | | -.1518 | |
| .865 | .0108 | | | | | | | | |
| .879 | | -.0841 | | | | | | | |
| .900 | -.0856 | | | -.0269 | | | -.1639 | | |
| .905 | | | -.1285 | | | | | | |
| .919 | | -.1672 | | | | | | | |
| .950 | | | | -.1849 | -.1449 | -.1788 | | | |
| .953 | | | -.2308 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2325 | | | | | | | | |
| 1.000 | | | -.2888 | | -.3517 | | -.3248 | | |

ALPHAO( 61) = 3.565 BETAO ( . = .374

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0889 | -.1280 | .2727 | .6774 | .6956 | .6808 | .8801 | .0863 | |
| .010 | -.0152 | -.0818 | .3377 | .2468 | .2230 | .2517 | .3841 | | |
| .020 | .0170 | .0032 | .3032 | .1893 | .2358 | .1870 | .2581 | .1442 | |
| .040 | | .0130 | .1506 | | | | | | |
| .050 | -.0549 | | | .1049 | .1042 | .2185 | .2628 | | |
| .069 | | | | | | | | .1428 | |
| 080 | | | | .1021 | | | | | |
| .081 | | | .0504 | | | | | | |
| .086 | | -.0122 | | | | | | | |

ARC97-019 TABI LVAP(ALLHL SEALED) LEFT WING BOT. (RETL48)

ALPHA( 0) = 3.585 BETA0 ( 2) = .374

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/Bw | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/Cm | | | | | | | | | |
| .094 | .0580 | | | | | | | | |
| .150 | | | | .2252 | .3599 | .3030 | .2599 | | |
| .157 | | | | | | | | .1534 | |
| .163 | | .1099 | | | | | | | |
| .177 | | | .0800 | | | | | | |
| .229 | .0698 | | | | | | | | |
| .246 | | .1238 | | | | | | | |
| .250 | | | | .3177 | .2765 | .2663 | .2246 | | |
| .274 | | | .3405 | | | | | | |
| .345 | | | | | | | | .2640 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .3203 | | | | | | | |
| .400 | | | | .3111 | .3179 | | .2841 | | |
| .402 | | | .3327 | | | | | | |
| .418 | | | | | | | | | -.2928 |
| .497 | .2623 | | | | | | | | |
| .503 | | | | | | | | .2113 | |
| .550 | | | | .3468 | .4072 | | | | |
| .565 | | | .3268 | | | | | | |
| .600 | | | | | | | .2808 | | |
| .637 | | .3203 | | | | | | | |
| .650 | | | | | | .2926 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2069 | | | | |
| .725 | | | | .1848 | | | | | |
| .730 | | | | | | | | | -.5070 |
| .750 | | | | | | .0380 | .0060 | | |
| .760 | | | .0121 | | | | | | |
| .775 | | | | .3542 | .3182 | | | | |
| .798 | | -.0933 | | | | | | | |
| .808 | | | .0897 | | | | | | |
| .834 | -.2168 | | | | | | | | |
| .839 | | -.0370 | | | | | | | |
| .850 | | | | .0734 | .0280 | -.1281 | | | |
| .857 | | | -.0747 | | | | | | |
| .862 | | | | | | | | -.2011 | |
| .865 | -.0425 | | | | | | | | |
| .879 | | -.1228 | | | | | | | |
| .900 | -.1098 | | | - 0933 | | | -.1915 | | |
| .907 | | | -.1992 | | | | | | |
| .919 | | -.1885 | | | | | | | |
| .950 | | | | -.2259 | -.2050 | -.2270 | | | |
| .953 | | | -.2715 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.2457 | | | | | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL48)

ALPHA( B) = 3.000 BETA0 ( B) = .374

SECTION ( 11)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .8720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.3089 | | -.3153 | | -.3533 | | |

ALPHA0( B) = 3.578 BETA0 ( 3) = 3.899

SECTION ( 11)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .8720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1552 | -.2691 | .2450 | .7125 | .6821 | .6647 | .6238 | .0378 | |
| .010 | -.0902 | -.2295 | .3607 | .5220 | .4015 | .4047 | .4128 | | |
| .020 | -.0537 | -.1177 | .3868 | .4473 | .3840 | .3393 | .2954 | .1153 | |
| .040 | | -.0994 | .3387 | | | | | | |
| .050 | -.0816 | | | .3329 | .2719 | .2914 | .2787 | | |
| .069 | | | | | | | | .1315 | |
| .080 | | | | .2897 | | | | | |
| .081 | | | .2768 | | | | | | |
| .088 | | .0014 | | | | | | | |
| .094 | .0025 | | | | | | | | |
| .150 | | | | .2711 | .2813 | .2781 | .2770 | | |
| .157 | | | | | | | | .1509 | |
| .163 | | .2508 | | | | | | | |
| .177 | | | .3151 | | | | | | |
| .229 | -.0153 | | | | | | | | |
| .246 | | .2163 | | | | | | | |
| .250 | | | | .2714 | .2781 | .2728 | .2422 | | |
| .274 | | | .3021 | | | | | | |
| .345 | | | | | | | | .2065 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .3088 | | | | | | | |
| .400 | | | | .2950 | .3026 | | .2937 | | |
| .402 | | | .3078 | | | | | | |
| .418 | | | | | | | | | -.3551 |
| .497 | .2885 | | | | | | | | |
| .503 | | | | | | | | .1910 | |
| .550 | | | | .2714 | .3073 | | | | |
| .565 | | | .2480 | | | | | | |
| .600 | | | | | | | .2291 | | |
| .637 | | .2263 | | | | | | | |
| .650 | | | | | | .2175 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1133 | | | | |
| .725 | | | | .0555 | | | | | |
| .730 | | | | | | | | | -.5248 |
| .750 | | | | | | -.0167 | -.0183 | | |

ARC87-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL46)

ALPHA(I 6) = 3.578 BETA(I 3) = 3.899

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | -.1008 | | | | | | |
| 775 | | | | .2104 | .2238 | | | | |
| 798 | | -.1599 | | | | | | | |
| 808 | | | .0263 | | | | | | |
| .834 | -.1128 | | | | | | | | |
| .839 | | .0067 | | | | | | | |
| .850 | | | | -.0247 | -.0404 | -.1726 | | | |
| 857 | | | -.0707 | | | | | | |
| 852 | | | | | | | | -.2176 | |
| 865 | -.0511 | | | | | | | | |
| 879 | | -.1165 | | | | | | | |
| 900 | -.1232 | | | -.1599 | | | -.2092 | | |
| 905 | | | -.1875 | | | | | | |
| 919 | | -.2039 | | | | | | | |
| 950 | | | | -.2644 | -.2434 | -.2683 | | | |
| 953 | | | -.2582 | | | | | | |
| 955 | | .0000 | | | | | | | |
| 965 | -.1585 | | | | | | | | |
| 1.000 | | | -.1935 | | -.2637 | | -.3638 | | |

ALPHA(I 7) = 6.314 BETA(I 1) = .393

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | 2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0524 | -.1433 | .2598 | .7139 | .7170 | .6938 | .6501 | .0018 | |
| 010 | .0030 | -.0651 | .3575 | .5183 | .4725 | .5056 | .5427 | | |
| 020 | .0030 | -.0010 | .3387 | .4398 | .4217 | .4301 | .4278 | .1365 | |
| .040 | | .0128 | .2047 | | | | | | |
| .050 | -.0545 | | | .3518 | .2967 | .3612 | .3902 | | |
| 069 | | | | | | | | .1768 | |
| 080 | | | | .3047 | | | | | |
| 091 | | | .2472 | | | | | | |
| 096 | | .0731 | | | | | | | |
| 094 | .0545 | | | | | | | | |
| 150 | | | | .2474 | .3183 | .3347 | .3533 | | |
| 157 | | | | | | | | .2139 | |
| 173 | | .1223 | | | | | | | |
| 177 | | | .2878 | | | | | | |
| 229 | .1022 | | | | | | | | |
| 246 | | .2349 | | | | | | | |
| .250 | | | | .3072 | .3154 | .3287 | .3132 | | |
| 274 | | | .2875 | | | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL46)

ALPHA( ) = 6.314 BETA( ) = .393

SECTION ( )LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .045 | | | | | | | | .2155 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .3133 | | | | | | | |
| .400 | | | | .3481 | .3658 | | .3798 | | |
| .402 | | | .3529 | | | | | | |
| .418 | | | | | | | | | -.4144 |
| .497 | .3001 | | | | | | | | |
| .503 | | | | | | | | .1752 | |
| .550 | | | | .3345 | .3590 | | | | |
| .565 | | | .3377 | | | | | | |
| .600 | | | | | | | .2526 | | |
| .637 | | .3279 | | | | | | | |
| .650 | | | | | | .2639 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1732 | | | | |
| .725 | | | | .1269 | | | | | |
| .730 | | | | | | | | | -.5391 |
| .750 | | | | | | .0214 | -.0065 | | |
| .760 | | | -.0331 | | | | | | |
| .775 | | | | .3068 | .2959 | | | | |
| .798 | | -.1307 | | | | | | | |
| .808 | | | .0754 | | | | | | |
| .834 | -.1810 | | | | | | | | |
| .839 | | -.0305 | | | | | | | |
| .850 | | | | .0532 | .0144 | -.1391 | | | |
| .857 | | | -.0867 | | | | | | |
| .882 | | | | | | | | -.2084 | |
| .865 | -.0307 | | | | | | | | |
| .879 | | -.0971 | | | | | | | |
| .900 | -.1171 | | | -.1019 | | | -.2010 | | |
| .905 | | | -.1920 | | | | | | |
| .919 | | -.1841 | | | | | | | |
| .950 | | | | -.2307 | -.2065 | -.2408 | | | |
| .953 | | | -.2522 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .985 | -.2281 | | | | | | | | |
| 1.000 | | | -.2923 | | -.3344 | | -.3821 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL47) ( 12 OCT 74 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 978.0000 IN. XT
LREF = 1297.0000 INCHES YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 2.000 RN/FT = 2.500
ELV-IB = 10.000 ELV-OB = -4.000
RUDDER = .000 SPDBRK = .000

ALPHA0( 1) = -6.283 BETA0 ( 1) = .072

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0191 | -.0045 | .2505 | .5643 | .5938 | .5393 | .5545 | -.1653 | |
| .010 | -.0219 | .0186 | .1231 | -.0151 | -.0636 | -.0309 | -.0160 | | |
| .020 | -.0072 | .0202 | .1465 | -.1086 | -.1148 | -.1540 | -.1559 | -.2284 | |
| .040 | | .0136 | .0388 | | | | | | |
| .050 | -.0270 | | | -.1383 | -.1597 | -.1853 | -.1917 | | |
| .069 | | | | | | | | -.2345 | |
| .080 | | | | -.1177 | | | | | |
| .081 | | | -.0455 | | | | | | |
| .085 | | -.0215 | | | | | | | |
| .094 | .0371 | | | | | | | | |
| .150 | | | | -.0639 | -.1765 | -.1527 | -.1904 | | |
| .157 | | | | | | | | -.2342 | |
| .163 | | .0389 | | | | | | | |
| .177 | | | -.0537 | | | | | | |
| .229 | .0049 | | | | | | | | |
| .246 | | -.0002 | | | | | | | |
| .250 | | | | -.0478 | -.1572 | -.1744 | -.1853 | | |
| .274 | | | -.0489 | | | | | | |
| .345 | | | | | | | | -.2527 | |
| .362 | 0000 | | | | | | | | |
| .390 | | -.0843 | | | | | | | |
| .400 | | | | .0133 | -.0860 | | -.1740 | | |
| .402 | | | .0764 | | | | | | |
| .418 | | | | | | | | | -.2401 |
| .497 | -.0893 | | | | | | | | |
| .503 | | | | | | | | -.1829 | |
| .550 | | | | .0292 | -.0012 | | | | |
| .555 | | | .0243 | | | | | | |
| .600 | | | | | | | -.1717 | | |
| .637 | | .0478 | | | | | | | |
| .650 | | | | | | -.0575 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0921 | | | | |
| .725 | | | | .1452 | | | | | |
| .730 | | | | | | | | | -.2689 |
| .750 | | | | | | -.0240 | -.2158 | | |
| .760 | | | .0492 | | | | | | |
| .775 | | | | .2517 | .1448 | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL47)

ALPHAO( 1) = -6.283 BETAO ( 1) = .072

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .798 | | -.0644 | | | | | | | |
| .808 | | | .2106 | | | | | | |
| .834 | -.1589 | | | | | | | | |
| .839 | | .0147 | | | | | | | |
| .850 | | | | .1584 | .1235 | -.0770 | | | |
| .857 | | | .0934 | | | | | | |
| .862 | | | | | | | | -.2196 | |
| .865 | -.0957 | | | | | | | | |
| .879 | | .0823 | | | | | | | |
| .900 | -.0497 | | | .0804 | | | -.1733 | | |
| .905 | | | -.0130 | | | | | | |
| .919 | | -.0283 | | | | | | | |
| .850 | | | | -.0288 | -.0037 | -.1817 | | | |
| .853 | | | -.0844 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1073 | | | | | | | | |
| 1.000 | | | -.1832 | | -.1101 | | -.1512 | | |

ALPHAO( 2) = -4.315 BETAO ( 1) = -4.217

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0131 | .0493 | .3387 | .7479 | .7050 | .6849 | .7227 | -.0843 | |
| .010 | -.0674 | .0772 | .2518 | .0973 | .0154 | .0585 | .1053 | | |
| .020 | -.0811 | .0838 | .2104 | -.0203 | -.0380 | -.0685 | -.0872 | -.1271 | |
| .040 | | .0748 | .0894 | | | | | | |
| .050 | -.0172 | | | -.0713 | -.0785 | -.1068 | -.1052 | | |
| .069 | | | | | | | | -.1393 | |
| .080 | | | | -.0903 | | | | | |
| .081 | | | -.0174 | | | | | | |
| .088 | | .0304 | | | | | | | |
| .094 | .1119 | | | | | | | | |
| .150 | | | | -.0913 | -.0984 | -.0918 | -.1062 | | |
| .157 | | | | | | | | -.1287 | |
| .163 | | .0712 | | | | | | | |
| .177 | | | -.0007 | | | | | | |
| .229 | .0720 | | | | | | | | |
| .248 | | .0448 | | | | | | | |
| .250 | | | | -.0419 | -.0981 | -.0956 | -.0838 | | |
| .274 | | | .0135 | | | | | | |
| .345 | | | | | | | | -.1056 | |
| .362 | .0000 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL47)

ALPHAC( 2) = -4.315 BETAO ( 1) = -4.817

SECTION ( 1)LEFT W..NG BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .8720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .390 | | -.0421 | | | | | | | |
| .400 | | | | -.0409 | -.0701 | | -.0960 | | |
| .402 | | | -.0222 | | | | | | |
| .418 | | | | | | | | | -.1360 |
| .497 | -.0508 | | | | | | | | |
| .503 | | | | | | | | -.0944 | |
| .550 | | | | .0879 | -.0337 | | | | |
| .565 | | | .1064 | | | | | | |
| .600 | | | | | | | -.1065 | | |
| .637 | | .1438 | | | | | | | |
| .650 | | | | | | -.1033 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1347 | | | | |
| .725 | | | | .2314 | | | | | |
| .730 | | | | | | | | | -.1796 |
| .750 | | | | | | -.1084 | -.1780 | | |
| .760 | | | .2003 | | | | | | |
| .775 | | | | .3092 | .2188 | | | | |
| .798 | | -.0038 | | | | | | | |
| .808 | | | .3479 | | | | | | |
| .834 | -.0907 | | | | | | | | |
| .839 | | .2071 | | | | | | | |
| .850 | | | | .2588 | .2260 | -.0758 | | | |
| .857 | | | .2032 | | | | | | |
| .882 | | | | | | | | -.1828 | |
| .885 | -.0143 | | | | | | | | |
| .879 | | .1395 | | | | | | | |
| .900 | .0515 | | | .1513 | | | -.1870 | | |
| .905 | | | .0603 | | | | | | |
| .919 | | .0522 | | | | | | | |
| .950 | | | | .0530 | .0748 | -.1014 | | | |
| .973 | | | -.0080 | | | | | | |
| .975 | | .0000 | | | | | | | |
| [illegible] | -.0702 | | | | | | | | |
| 1.000 | | | -.1227 | | -.1478 | | -.1659 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL47)

ALPHAO( 2) = -4.282 BETAO ( 2) = .044

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .8720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0381 | -.0118 | .2151 | .5539 | .5995 | .5595 | .5803 | -.1333 | |
| .010 | -.0526 | .0078 | .0905 | .0234 | -.0432 | -.0016 | .0276 | | |
| .020 | -.0356 | .0087 | .0997 | -.0658 | -.0927 | -.1166 | -.1211 | -.1855 | |
| .040 | | .0008 | .0279 | | | | | | |
| .050 | -.0651 | | | -.0997 | -.1302 | -.1481 | -.1574 | | |
| .069 | | | | | | | | -.1910 | |
| .080 | | | | -.1048 | | | | | |
| .081 | | | -.0519 | | | | | | |
| .086 | | -.0342 | | | | | | | |
| .094 | .0430 | | | | | | | | |
| .150 | | | | -.0656 | -.1479 | -.1301 | -.1596 | | |
| .157 | | | | | | | | -.1832 | |
| .163 | | .0205 | | | | | | | |
| .177 | | | -.0417 | | | | | | |
| .229 | .0000 | | | | | | | | |
| .246 | | -.0039 | | | | | | | |
| .250 | | | | -.0219 | -.1460 | -.1439 | -.1413 | | |
| .274 | | | -.0442 | | | | | | |
| .345 | | | | | | | | -.1507 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0742 | | | | | | | |
| .400 | | | | .0064 | -.0561 | | -.1507 | | |
| .402 | | | .0794 | | | | | | |
| .418 | | | | | | | | | -.2015 |
| .497 | -.0751 | | | | | | | | |
| .503 | | | | | | | | -.1452 | |
| .550 | | | | .0519 | .0094 | | | | |
| .565 | | | .0435 | | | | | | |
| .600 | | | | | | | -.1558 | | |
| .637 | | .0631 | | | | | | | |
| .650 | | | | | | -.0585 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1238 | | | | |
| .725 | | | | .1685 | | | | | |
| .730 | | | | | | | | | -.2388 |
| .750 | | | | | | -.0122 | -.2084 | | |
| .760 | | | .0810 | | | | | | |
| .775 | | | | .2130 | .1751 | | | | |
| .798 | | -.0507 | | | | | | | |
| .808 | | | .2310 | | | | | | |
| .834 | -.1480 | | | | | | | | |
| .839 | | .0377 | | | | | | | |
| .850 | | | | .1702 | .1498 | -.0556 | | | |
| .857 | | | .0962 | | | | | | |
| .862 | | | | | | | | -.1993 | |

ARC97-019 !A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL47)

ALPHA 2) = -4.282 BETAO ( 2) = .044

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | -.0799 | | | | | | | | |
| .879 | | .0561 | | | | | | | |
| .900 | -.0414 | | | .0635 | | | -.1604 | | |
| .905 | | | -.0267 | | | | | | |
| .919 | | -.0373 | | | | | | | |
| .950 | | | | -.0273 | .0022 | -.1005 | | | |
| .953 | | | -.0747 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1109 | | | | | | | | |
| 1.000 | | | -.1739 | | -.1443 | | -.1610 | | |

ALPHAO( 2) = -4.245 BETAO ( 3) = 3.589

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0665 | -.0554 | .2044 | .4995 | .4152 | .3787 | .4396 | -.1948 | |
| .010 | -.0621 | -.0532 | .1382 | -.0441 | -.1217 | -.0675 | -.0370 | | |
| .020 | -.0724 | -.0570 | .1098 | -.1265 | -.1548 | -.1590 | -.1611 | -.2374 | |
| .040 | | -.0529 | .0544 | | | | | | |
| .050 | -.0225 | | | -.1316 | -.1755 | -.1865 | -.1930 | | |
| .069 | | | | | | | | -.2371 | |
| .080 | | | | -.1202 | | | | | |
| .081 | | | -.0312 | | | | | | |
| .086 | | .0009 | | | | | | | |
| .094 | -.0476 | | | | | | | | |
| .150 | | | | -.1127 | -.1586 | -.1527 | -.1981 | | |
| .157 | | | | | | | | -.2371 | |
| .163 | | .0614 | | | | | | | |
| .177 | | | -.0382 | | | | | | |
| .239 | -.0460 | | | | | | | | |
| .245 | | -.0405 | | | | | | | |
| .250 | | | | -.0963 | -.1236 | -.1717 | -.1725 | | |
| .274 | | | -.0391 | | | | | | |
| .345 | | | | | | | | -.1883 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0513 | | | | | | | |
| .400 | | | | .0755 | .0212 | | -.1700 | | |
| .402 | | | .0984 | | | | | | |
| .418 | | | | | | | | | -.2476 |
| .497 | -.0344 | | | | | | | | |
| .503 | | | | | | | | -.1687 | |
| .550 | | | | .0724 | .0378 | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL47)

ALPHAO( 2) = -4.245 BETAO ( 3) = 3.589

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .0774 | | | | | | |
| .600 | | | | | | | -.1519 | | |
| .637 | | .0585 | | | | | | | |
| .650 | | | | | | -.0018 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0616 | | | | |
| .725 | | | | .0031 | | | | | |
| .730 | | | | | | | | | -.2724 |
| .750 | | | | | | -.0405 | -.0964 | | |
| .760 | | | -.0958 | | | | | | |
| .775 | | | | .1725 | .1692 | | | | |
| .798 | | -.1500 | | | | | | | |
| .808 | | | -.0283 | | | | | | |
| .834 | -.1638 | | | | | | | | |
| .839 | | -.0663 | | | | | | | |
| .850 | | | | .0501 | .0682 | -.0538 | | | |
| .857 | | | -.0551 | | | | | | |
| .862 | | | | | | | | -.1731 | |
| .865 | -.0891 | | | | | | | | |
| .879 | | -.0822 | | | | | | | |
| .900 | -.1149 | | | -.0520 | | | -.1044 | | |
| .905 | | | -.0824 | | | | | | |
| .919 | | -.1328 | | | | | | | |
| .950 | | | | -.1249 | -.0984 | -.1198 | | | |
| .953 | | | -.1436 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1210 | | | | | | | | |
| 1.000 | | | -.1974 | | -.1792 | | -.1306 | | |

ALPHAO( 3) = -2.148 BETAO ( 1) = .035

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0583 | -.0253 | .1854 | .6333 | .5982 | .5991 | .6125 | -.0884 | |
| .010 | -.0694 | .0095 | .1077 | .0698 | -.0136 | .0359 | .0667 | | |
| .020 | -.0440 | -.0075 | .1424 | -.0400 | -.0726 | -.0748 | -.0880 | -.1308 | |
| .040 | | -.0119 | .0678 | | | | | | |
| .050 | -.0817 | | | -.0841 | -.0933 | -.1131 | -.1238 | | |
| .069 | | | | | | | | -.1430 | |
| .080 | | | | -.0990 | | | | | |
| .081 | | | -.0423 | | | | | | |
| .086 | | -.0348 | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL47)

ALPHA( 3) = -2.48 BETA0 ( 1) = .035

SECT ON ( 1)LEFT ,-.-, BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .8730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CH | | | | | | | | | |
| .094 | .0191 | | | | | | | | |
| .150 | | | | -.0933 | -.1162 | -.1060 | -.1258 | | |
| .157 | | | | | | | | -.1366 | |
| .163 | | .0168 | | | | | | | |
| .177 | | | -.0244 | | | | | | |
| .229 | -.0131 | | | | | | | | |
| .246 | | .0030 | | | | | | | |
| .250 | | | | -.0062 | -.1258 | -.1177 | -.1123 | | |
| .274 | | | -.0302 | | | | | | |
| .345 | | | | | | | | -.1181 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0397 | | | | | | | |
| .400 | | | | .0203 | -.0340 | | -.1217 | | |
| .402 | | | .0789 | | | | | | |
| .418 | | | | | | | | | -.1482 |
| .497 | -.0311 | | | | | | | | |
| .503 | | | | | | | | -.1188 | |
| .550 | | | | .0897 | .0226 | | | | |
| .565 | | | .0620 | | | | | | |
| .600 | | | | | | | -.1314 | | |
| .637 | | .0826 | | | | | | | |
| .650 | | | | | | -.0188 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1545 | | | | |
| .725 | | | | .2109 | | | | | |
| .730 | | | | | | | | | -.1999 |
| .750 | | | | | | .0367 | -.1893 | | |
| .760 | | | .1086 | | | | | | |
| .775 | | | | .3184 | .2430 | | | | |
| .799 | | -.0365 | | | | | | | |
| .808 | | | .2417 | | | | | | |
| .824 | -.1403 | | | | | | | | |
| .829 | | .0668 | | | | | | | |
| .850 | | | | .2030 | .1839 | -.0247 | | | |
| .852 | | | .0997 | | | | | | |
| .882 | | | | | | | | -.1672 | |
| .885 | -.0685 | | | | | | | | |
| .879 | | .0455 | | | | | | | |
| .910 | -.0340 | | | .0818 | | | -.1249 | | |
| .905 | | | -.0203 | | | | | | |
| .919 | | -.0359 | | | | | | | |
| .950 | | | | -.0194 | .0048 | -.0721 | | | |
| .953 | | | -.0665 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1090 | | | | | | | | |

ARC97-019 IA8I LVAP(ALLHL SEALED) LEFT WING BOT. (RETL47)

ALPHAO( 3) = -2.148 BETAO ( 1) = .035

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1744 | | -.1637 | | -.1708 | | |

ALPHAO( 4) = -.077 BETAO ( 1) = -6.234

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0109 | .0843 | .4188 | .8680 | .8113 | .8041 | .8211 | .0750 | |
| .010 | -.0359 | .0633 | .2912 | .2030 | .1181 | .1619 | .2505 | | |
| .020 | -.0603 | .0410 | .2227 | .0689 | .0773 | .0530 | .0473 | .0291 | |
| .040 | | .1003 | .1895 | | | | | | |
| .050 | .0408 | | | .0116 | .0369 | .0111 | .0119 | | |
| .069 | | | | | | | | .0059 | |
| .080 | | | | -.0041 | | | | | |
| .081 | | | .0684 | | | | | | |
| .086 | | .0770 | | | | | | | |
| .094 | .1026 | | | | | | | | |
| .150 | | | | -.0239 | -.0029 | .0157 | .0112 | | |
| .157 | | | | | | | | .0010 | |
| .163 | | .1660 | | | | | | | |
| .177 | | | .0718 | | | | | | |
| .228 | .0981 | | | | | | | | |
| .248 | | .1393 | | | | | | | |
| .250 | | | | .0299 | -.0158 | .0081 | .0097 | | |
| .274 | | | .0066 | | | | | | |
| .345 | | | | | | | | .0185 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0345 | | | | | | | |
| .400 | | | | .0298 | .0142 | | .0081 | | |
| .402 | | | -.0248 | | | | | | |
| .418 | | | | | | | | | .0114 |
| .497 | .0018 | | | | | | | | |
| .503 | | | | | | | | .0081 | |
| .550 | | | | .1385 | .0388 | | | | |
| .585 | | | .1880 | | | | | | |
| .600 | | | | | | | -.0184 | | |
| .837 | | .1982 | | | | | | | |
| .850 | | | | | | -.0094 | | | |
| .870 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .0384 | | | | |
| .705 | | | | .3888 | | | | | |
| .730 | | | | | | | | | -.0488 |
| .750 | | | | | | -.0735 | -.1087 | | |

ARC97-018 1A81 (VAP(ALLHL SEALED) LEFT WING BOT. (RETL47)

ALPHA( 41 = -.078 BETAO ( 21 = -5.234

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CH | | | | | | | | | |
| .760 | | | .3995 | | | | | | |
| .775 | | | | .4474 | .3254 | | | | |
| .798 | | .2848 | | | | | | | |
| .808 | | | .4735 | | | | | | |
| .834 | -.0436 | | | | | | | | |
| .839 | | .3460 | | | | | | | |
| .850 | | | | .3946 | .3614 | -.0442 | | | |
| .857 | | | .2963 | | | | | | |
| .862 | | | | | | | | -.1283 | |
| .865 | .1448 | | | | | | | | |
| .879 | | .2642 | | | | | | | |
| .900 | .1352 | | | .2474 | | | -.1712 | | |
| .905 | | | .1360 | | | | | | |
| .919 | | .0912 | | | | | | | |
| .950 | | | | .1191 | .1392 | -.0242 | | | |
| .953 | | | .0544 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0948 | | | | | | | | |
| 1.000 | | | -.1183 | | -.1975 | | -.1547 | | |

ALPHA0( 41 = -.078 BETAO ( 21 = -4.257

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | 2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CH | | | | | | | | | |
| .000 | -.0354 | .0467 | .3514 | .7949 | .7507 | .7346 | .7731 | .0487 | |
| .010 | -.0748 | .0400 | .2768 | .1633 | .0829 | .1217 | .2126 | | |
| .020 | -.0770 | .0703 | .2660 | .0375 | .0418 | .0169 | .0200 | .0074 | |
| .040 | | .0725 | .1228 | | | | | | |
| .060 | -.0312 | | | -.0173 | .0030 | -.0207 | -.0149 | | |
| .080 | | | | | | | | -.0169 | |
| .100 | | | | -.0347 | | | | | |
| .080 | | | .0208 | | | | | | |
| .086 | | .0394 | | | | | | | |
| .092 | .0654 | | | | | | | | |
| .160 | | | | -.0511 | -.0353 | -.0142 | -.0139 | | |
| .180 | | | | | | | | -.0188 | |
| .183 | | .0818 | | | | | | | |
| .200 | | | .0227 | | | | | | |
| .229 | .0535 | | | | | | | | |
| .246 | | .0720 | | | | | | | |
| .250 | | | | -.0050 | -.0337 | -.0197 | -.0081 | | |
| .274 | | | .0026 | | | | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL47)

ALPHA0( 1) = - 076 BETA0 ( 2) = -4.257

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | -.0039 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0177 | | | | | | | |
| .400 | | | | -.0038 | -.0207 | | -.0088 | | |
| .402 | | | -.0449 | | | | | | |
| .418 | | | | | | | | | -.0166 |
| .497 | -.0460 | | | | | | | | |
| .503 | | | | | | | | -.0143 | |
| .550 | | | | .1324 | .0065 | | | | |
| .565 | | | .1534 | | | | | | |
| .600 | | | | | | | -.0327 | | |
| .637 | | .1614 | | | | | | | |
| 650 | | | | | | -.0336 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2202 | | | | |
| .725 | | | | .3147 | | | | | |
| .730 | | | | | | | | | -.0740 |
| .750 | | | | | | -.0810 | -.1231 | | |
| .760 | | | .3381 | | | | | | |
| .775 | | | | .4004 | .2960 | | | | |
| .798 | | .2068 | | | | | | | |
| .808 | | | .4244 | | | | | | |
| .834 | -.0735 | | | | | | | | |
| .839 | | .2815 | | | | | | | |
| .850 | | | | .3343 | .3102 | -.0184 | | | |
| .857 | | | .2545 | | | | | | |
| .862 | | | | | | | | -.1405 | |
| .865 | .0105 | | | | | | | | |
| .879 | | .1356 | | | | | | | |
| .900 | .0864 | | | .2052 | | | -.1722 | | |
| 905 | | | .0906 | | | | | | |
| .919 | | .0899 | | | | | | | |
| .950 | | | | .0887 | .1151 | -.0158 | | | |
| .953 | | | .0026 | | | | | | |
| .955 | | .0000 | | | | | | | |
| 965 | -.0972 | | | | | | | | |
| 1.000 | | | -.1431 | | -.1915 | | -.1628 | | |

ARC97-019 1A8; LVAP(ALLHL SEALED) LEFT WING BOT. (RETL47)

ALPHA( N1 ) = -.074 BETA( N1 ) = -2.080

SECTION ( 11)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0606 | -.0011 | .3056 | .7225 | .6829 | .6928 | .7113 | .0120 | |
| .010 | -.0718 | .0005 | .2379 | .1330 | .0541 | .1010 | .1711 | | |
| .020 | -.0434 | .0352 | .1988 | .0156 | .0125 | -.0040 | -.0079 | -.0290 | |
| .040 | | .0470 | .0814 | | | | | | |
| .050 | -.0569 | | | -.0369 | -.0241 | -.0434 | -.0443 | | |
| .059 | | | | | | | | -.0468 | |
| .080 | | | | -.0583 | | | | | |
| .081 | | | -.0185 | | | | | | |
| .086 | | .0119 | | | | | | | |
| .094 | .0214 | | | | | | | | |
| .150 | | | | -.0606 | -.0530 | -.0372 | -.0459 | | |
| .157 | | | | | | | | -.0487 | |
| .163 | | .0470 | | | | | | | |
| .177 | | | -.0033 | | | | | | |
| .229 | .0359 | | | | | | | | |
| .246 | | .0436 | | | | | | | |
| .250 | | | | -.0369 | -.0610 | -.0465 | -.0390 | | |
| .274 | | | .0133 | | | | | | |
| .345 | | | | | | | | -.0339 | |
| .362 | .0000 | | | | | | | | |
| .390 | | -.0459 | | | | | | | |
| .400 | | | | -.0256 | -.0478 | | -.0390 | | |
| .402 | | | .0839 | | | | | | |
| .418 | | | | | | | | | -.0481 |
| .497 | -.0547 | | | | | | | | |
| .503 | | | | | | | | -.0426 | |
| .550 | | | | .1191 | .0124 | | | | |
| .565 | | | .1122 | | | | | | |
| .600 | | | | | | | -.0542 | | |
| .637 | | .1127 | | | | | | | |
| .650 | | | | | | -.0520 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2022 | | | | |
| .725 | | | | .2848 | | | | | |
| .750 | | | | | | | | | -.1010 |
| .750 | | | | | | -.0320 | -.1428 | | |
| .760 | | | .2735 | | | | | | |
| .775 | | | | .3598 | .2758 | | | | |
| .798 | | .0805 | | | | | | | |
| .808 | | | .3394 | | | | | | |
| .934 | -.0727 | | | | | | | | |
| .939 | | .2470 | | | | | | | |
| .850 | | | | .2853 | .2624 | .0256 | | | |
| .857 | | | .2137 | | | | | | |
| .862 | | | | | | | | -.1518 | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL47)

ALPHAO( 3) = -.074 BETAO ( 3) = -2.080

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .865 | .0021 | | | | | | | | |
| .879 | | .1858 | | | | | | | |
| .900 | .0298 | | | .1858 | | | 1690 | | |
| .905 | | | .0823 | | | | | | |
| .919 | | .0499 | | | | | | | |
| .950 | | | | .0583 | .0821 | -.0205 | | | |
| .953 | | | .0069 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0866 | | | | | | | | |
| 1.000 | | | -.1487 | | -.1882 | | -.1713 | | |

ALPHAO( 4) = -.070 BETAO ( 4) = .011

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7600 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0735 | -.0391 | .2239 | .6743 | .6444 | .6405 | .6472 | -.0223 | |
| .010 | -.0525 | -.0171 | .1620 | .1090 | .0323 | .0767 | .1332 | | |
| .020 | -.0483 | .0005 | .1260 | .0002 | -.0081 | -.0217 | -.0316 | -.0560 | |
| .040 | | -.0027 | .1113 | | | | | | |
| .050 | -.1026 | | | -.0506 | -.0422 | -.0591 | -.0664 | | |
| .069 | | | | | | | | -.0718 | |
| .080 | | | | -.0717 | | | | | |
| .081 | | | -.0296 | | | | | | |
| .086 | | -.0311 | | | | | | | |
| .094 | -.0112 | | | | | | | | |
| .150 | | | | -.0784 | -.0789 | -.0587 | -.0655 | | |
| .157 | | | | | | | | -.0699 | |
| .163 | | .0432 | | | | | | | |
| .177 | | | -.0139 | | | | | | |
| .229 | -.0012 | | | | | | | | |
| .246 | | .0293 | | | | | | | |
| .250 | | | | -.0030 | -.0084 | -.0093 | -.0389 | | |
| .274 | | | -.0076 | | | | | | |
| .345 | | | | | | | | -.0583 | |
| .382 | .0000 | | | | | | | | |
| .390 | | -.0156 | | | | | | | |
| .400 | | | | .0858 | -.0034 | | -.0637 | | |
| .402 | | | .1237 | | | | | | |
| .418 | | | | | | | | | -.0728 |
| .497 | .0114 | | | | | | | | |
| .503 | | | | | | | | -.0637 | |
| .550 | | | | .1207 | .0783 | | | | |

ARC97-019 TAB1 (VAPTALLHL SEALED) LEFT WING BOT. (RETL47)

ALPHA( N1 = -.0% BETAO ( N1 = .011

SECTION 1 (LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3540 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .0857 | | | | | | |
| 600 | | | | | | | -.0780 | | |
| 637 | | .1062 | | | | | | | |
| 650 | | | | | | .0184 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2107 | | | | |
| .725 | | | | .2819 | | | | | |
| .730 | | | | | | | | | -.1225 |
| .750 | | | | | | .0978 | -.1540 | | |
| 760 | | | .1815 | | | | | | |
| .775 | | | | .3589 | .3063 | | | | |
| 799 | | -.0080 | | | | | | | |
| 808 | | | .3033 | | | | | | |
| .834 | -.1268 | | | | | | | | |
| 839 | | .1222 | | | | | | | |
| 850 | | | | .2416 | .2528 | .0458 | | | |
| [illegible] | | | .1547 | | | | | | |
| .862 | | | | | | | | -.1510 | |
| .865 | -.0348 | | | | | | | | |
| .879 | | .0970 | | | | | | | |
| .900 | -.0277 | | | .1280 | | | -.0873 | | |
| .905 | | | .0218 | | | | | | |
| .919 | | -.0009 | | | | | | | |
| 950 | | | | .0205 | .0454 | -.0210 | | | |
| .953 | | | -.0417 | | | | | | |
| .955 | | .0000 | | | | | | | |
| 955 | -.0994 | | | | | | | | |
| 1.000 | | | -.1885 | | -.1883 | | -.1758 | | |

ALPHA( N1 = -.080 BETAO ( 5) = 2.115

SECTION 1 (LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y BW | .2990 | .3540 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 000 | -.1006 | -.0818 | .2239 | .6000 | .5607 | .5662 | .5798 | -.0511 | |
| 010 | -.0978 | -.0418 | .2100 | .0748 | -.0025 | .0430 | .0934 | | |
| 020 | -.0866 | -.0443 | .1829 | -.0234 | -.0338 | -.0531 | -.0579 | -.0778 | |
| 040 | | -.0475 | .0769 | | | | | | |
| 050 | -.1040 | | | -.0829 | -.0593 | -.0891 | -.0904 | | |
| 069 | | | | | | | | -.0889 | |
| 080 | | | | -.0232 | | | | | |
| 081 | | | .0318 | | | | | | |
| 088 | | -.0211 | | | | | | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL47)

ALPHAO( 4) = -.060 BETAO ( 5) = 2.115

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0340 | | | | | | | | |
| .150 | | | | -.0833 | -.0638 | -.0688 | -.0843 | | |
| .157 | | | | | | | | -.0821 | |
| .163 | | .0915 | | | | | | | |
| .177 | | | .0000 | | | | | | |
| .229 | -.0560 | | | | | | | | |
| .246 | | .0181 | | | | | | | |
| .250 | | | | -.0223 | -.0574 | -.0646 | -.0724 | | |
| .[illegible] | | | -.0380 | | | | | | |
| .345 | | | | | | | | -.0669 | |
| .362 | 0000 | | | | | | | | |
| .390 | | -.0141 | | | | | | | |
| .400 | | | | .1235 | -.0249 | | -.0624 | | |
| 402 | | | .1388 | | | | | | |
| 418 | | | | | | | | | -.0869 |
| .497 | -.0005 | | | | | | | | |
| .503 | | | | | | | | -.0721 | |
| .550 | | | | .1798 | .1389 | | | | |
| .585 | | | .1783 | | | | | | |
| .600 | | | | | | | -.0430 | | |
| .637 | | .1516 | | | | | | | |
| .650 | | | | | | .1805 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2352 | | | | |
| .725 | | | | .2412 | | | | | |
| .730 | | | | | | | | | -.1340 |
| .750 | | | | | | .1098 | -.1080 | | |
| .760 | | | .0038 | | | | | | |
| .775 | | | | .3481 | .3645 | | | | |
| .798 | | -.0495 | | | | | | | |
| .808 | | | .1834 | | | | | | |
| .834 | -.1759 | | | | | | | | |
| .839 | | .0226 | | | | | | | |
| .850 | | | | .1703 | .2168 | .0395 | | | |
| .857 | | | .0316 | | | | | | |
| .882 | | | | | | | | -.1227 | |
| .889 | -.1102 | | | | | | | | |
| .879 | | -.0415 | | | | | | | |
| .300 | -.0711 | | | .0459 | | | -.0041 | | |
| .905 | | | - 9871 | | | | | | |
| .919 | | -.0849 | | | | | | | |
| .950 | | | | -.0507 | -.0208 | -.0340 | | | |
| .953 | | | -.1249 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -. 73 | | | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL47)

ALPHA( 4) = -.060 BETA( 5) = 2.115

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1878 | | -.1855 | | -.1592 | | |

ALPHA( 4) = -.050 BETA( 6) = 3.551

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1054 | -.0687 | .1797 | .5318 | .4900 | .4916 | .5226 | -.0767 | |
| .010 | -.0928 | -.0664 | .1803 | .0562 | -.0242 | .0071 | .0695 | | |
| .020 | -.0935 | -.0661 | .1647 | -.0248 | -.0496 | -.0813 | -.0728 | -.0903 | |
| .040 | | -.0601 | .0838 | | | | | | |
| .050 | -.1134 | | | -.0412 | -.0786 | -.1049 | -.1014 | | |
| .059 | | | | | | | | -.1009 | |
| .080 | | | | -.0655 | | | | | |
| .081 | | | -.0156 | | | | | | |
| .086 | | .0008 | | | | | | | |
| .094 | -.1109 | | | | | | | | |
| .150 | | | | -.0630 | -.0792 | -.0718 | -.0918 | | |
| .157 | | | | | | | | -.0899 | |
| .163 | | .0648 | | | | | | | |
| .177 | | | -.0322 | | | | | | |
| .229 | -.0451 | | | | | | | | |
| .246 | | -.0093 | | | | | | | |
| .250 | | | | -.0478 | -.0697 | -.0673 | -.0783 | | |
| .274 | | | -.0048 | | | | | | |
| .345 | | | | | | | | -.0628 | |
| .362 | .0000 | | | | | | | | |
| .363 | | .0302 | | | | | | | |
| .420 | | | | .1640 | .1252 | | -.0456 | | |
| .432 | | | .1631 | | | | | | |
| [illegible] | | | | | | | | | -.0849 |
| .470 | -.0294 | | | | | | | | |
| .503 | | | | | | | | -.0618 | |
| .550 | | | | .1888 | .1846 | | | | |
| .565 | | | .1788 | | | | | | |
| .600 | | | | | | | -.0039 | | |
| .637 | | .1554 | | | | | | | |
| .650 | | | | | | .1352 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2521 | | | | |
| .725 | | | | .1581 | | | | | |
| .730 | | | | | | | | | -.1314 |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL47)

ALPHAO( 4) = -.050 BETAO ( 6) = 3.551

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | -.0121 | | | | | | |
| .775 | | | | .2517 | .3121 | | | | |
| .798 | | -.1091 | | | | | | | |
| .808 | | | .0818 | | | | | | |
| .834 | -.1601 | | | | | | | | |
| .839 | | .0197 | | | | | | | |
| .850 | | | | .0733 | .1227 | .0258 | | | |
| .857 | | | -.0061 | | | | | | |
| .862 | | | | | | | | -.0791 | |
| .865 | -.0806 | | | | | | | | |
| .879 | | -.0355 | | | | | | | |
| .900 | -.0832 | | | -.0267 | | | -.0003 | | |
| .905 | | | -.0810 | | | | | | |
| .913 | | -.1183 | | | | | | | |
| .950 | | | | -.1047 | -.0813 | -.0680 | | | |
| .953 | | | -.1447 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1305 | | | | | | | | |
| 1.000 | | | -.2014 | | -.2053 | | -.1608 | | |

ALPHAO( 4) = -.026 BETAO ( 7) = 6.169

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1025 | -.1132 | .1102 | .4622 | .4574 | .4301 | .4483 | -.0235 | |
| .010 | -.1089 | -.1154 | .1359 | .0203 | -.0547 | -.0160 | .0312 | | |
| .020 | -.1199 | -.0902 | .1222 | -.0617 | -.0901 | -.0971 | -.0978 | -.0442 | |
| .040 | | -.0809 | .0409 | | | | | | |
| .050 | -.1382 | | | -.0765 | -.1130 | -.1188 | -.1226 | | |
| .069 | | | | | | | | -.0510 | |
| .080 | | | | -.0945 | | | | | |
| .081 | | | -.0525 | | | | | | |
| .086 | | -.0487 | | | | | | | |
| .094 | -.1009 | | | | | | | | |
| .150 | | | | -.0626 | -.1047 | -.0884 | -.1049 | | |
| .157 | | | | | | | | -.0422 | |
| .163 | | .0189 | | | | | | | |
| .177 | | | -.0378 | | | | | | |
| .229 | -.0598 | | | | | | | | |
| .246 | | -.0225 | | | | | | | |
| .250 | | | | .0404 | -.0452 | -.0820 | -.0636 | | |
| .274 | | | .0639 | | | | | | |

ARC87-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL47)

ALPHA( 4) = -.026 BETA0 ( 7) = 6.189

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | .0259 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1018 | | | | | | | |
| .400 | | | | .1703 | .1938 | | -.0306 | | |
| .402 | | | .1691 | | | | | | |
| .418 | | | | | | | | | -.0345 |
| .497 | .0154 | | | | | | | | |
| .503 | | | | | | | | .0857 | |
| .550 | | | | .1703 | .1736 | | | | |
| .565 | | | .1531 | | | | | | |
| .600 | | | | | | | .1565 | | |
| .637 | | .1096 | | | | | | | |
| .650 | | | | | | 1360 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .1840 | | | | |
| .725 | | | | .0426 | | | | | |
| .730 | | | | | | | | | -.0339 |
| .750 | | | | | | .1047 | .1361 | | |
| .760 | | | -.0761 | | | | | | |
| .775 | | | | .1596 | .2238 | | | | |
| .798 | | -.1189 | | | | | | | |
| .808 | | | .0482 | | | | | | |
| .834 | -.1126 | | | | | | | | |
| .839 | | -.0075 | | | | | | | |
| .850 | | | | .0144 | .0449 | -.0330 | | | |
| .857 | | | -.0174 | | | | | | |
| .862 | | | | | | | | .0149 | |
| .855 | -.0635 | | | | | | | | |
| .879 | | -.0780 | | | | | | | |
| .900 | -.1078 | | | -.0643 | | | .0179 | | |
| .905 | | | -.1102 | | | | | | |
| .919 | | -.1384 | | | | | | | |
| .930 | | | | -.1276 | -.1268 | -.1191 | | | |
| .934 | | | -.1841 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1017 | | | | | | | | |
| 1.000 | | | -.2004 | | -.2119 | | -.1430 | | |

ARC97-019 IAB1 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL47)

ALPHAO( 5) = 1.992 BETAO ( 1) = .010

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0326 | -.0418 | .2657 | .7008 | .6747 | .6711 | .6805 | .0475 | |
| .010 | -.0039 | -.0185 | .2409 | .1546 | .0815 | .1361 | .2118 | | |
| .020 | -.0093 | .0242 | .2266 | .0425 | .0579 | .0467 | .0378 | .0330 | |
| .040 | | .0182 | .0890 | | | | | | |
| .050 | -.0103 | | | -.0155 | .0185 | .0107 | .0100 | | |
| .069 | | | | | | | | .0110 | |
| .080 | | | | -.0391 | | | | | |
| .081 | | | -.0174 | | | | | | |
| .086 | | -.0163 | | | | | | | |
| .094 | -.0606 | | | | | | | | |
| .150 | | | | -.0174 | -.0274 | .0020 | .0110 | | |
| .157 | | | | | | | | .0055 | |
| .163 | | .0498 | | | | | | | |
| .177 | | | -.0078 | | | | | | |
| .229 | .0090 | | | | | | | | |
| .246 | | .0324 | | | | | | | |
| .250 | | | | -.0032 | -.0264 | -.0057 | .0130 | | |
| .274 | | | .0189 | | | | | | |
| .345 | | | | | | | | .0110 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0118 | | | | | | | |
| .400 | | | | .1071 | .0240 | | .0059 | | |
| .402 | | | .1788 | | | | | | |
| .418 | | | | | | | | | -.0224 |
| .497 | .0306 | | | | | | | | |
| .503 | | | | | | | | -.0055 | |
| .550 | | | | .1795 | .1178 | | | | |
| .565 | | | .1546 | | | | | | |
| .600 | | | | | | | -.0151 | | |
| .637 | | .15[illegible] | | | | | | | |
| .650 | | | | | | .0507 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3137 | | | | |
| .725 | | | | .3781 | | | | | |
| .730 | | | | | | | | | -.0988 |
| .750 | | | | | | .1705 | -.1163 | | |
| .760 | | | .2585 | | | | | | |
| .775 | | | | .4393 | .4153 | | | | |
| .798 | | .0484 | | | | | | | |
| .808 | | | .3382 | | | | | | |
| .834 | -.1178 | | | | | | | | |
| .838 | | .1888 | | | | | | | |
| .850 | | | | .2881 | .3084 | .1038 | | | |
| .857 | | | .1702 | | | | | | |
| .862 | | | | | | | | -.1457 | |

ARC97-019 1A81 LVAP(ALLML SEALED) LEFT WING BOT. (RETL47)

ALPHAO( 5) = 1.992 BETAO ( 1) = .010

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .885 | -.0180 | | | | | | | | |
| .879 | | .0738 | | | | | | | |
| .900 | -.0010 | | | .1483 | | | -.[illegible]339 | | |
| .905 | | | .0243 | | | | | | |
| .919 | | .0018 | | | | | | | |
| .950 | | | | .0312 | .0559 | .0181 | | | |
| .953 | | | -.0810 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .985 | -.1033 | | | | | | | | |
| 1.000 | | | -.1768 | | -.1909 | | -.1787 | | |

ALPHAO( 6) = 3.472 BETAO ( 1) = -4.227

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | .0428 | .0287 | .3888 | .8232 | .8002 | .8003 | .8287 | .1868 | |
| .010 | .0820 | .0427 | .3601 | .2431 | .1841 | .2782 | .3884 | | |
| .020 | .0517 | .0825 | .3128 | .1243 | .2004 | .1940 | .1797 | .1644 | |
| .040 | | .1027 | .1800 | | | | | | |
| .050 | .0691 | | | .0888 | .1168 | .1321 | .1551 | | |
| .069 | | | | | | | | .1372 | |
| .080 | | | | .0378 | | | | | |
| .081 | | | .0519 | | | | | | |
| .088 | | .0555 | | | | | | | |
| .094 | .0046 | | | | | | | | |
| .150 | | | | .0117 | .0654 | .1128 | .1422 | | |
| .157 | | | | | | | | .1226 | |
| .163 | | .1161 | | | | | | | |
| .177 | | | .0541 | | | | | | |
| .229 | .0482 | | | | | | | | |
| .246 | | .0799 | | | | | | | |
| .250 | | | | .0489 | .0571 | .1026 | .1284 | | |
| .274 | | | -.0072 | | | | | | |
| .345 | | | | | | | | .1077 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0247 | | | | | | | |
| .400 | | | | .0577 | .0580 | | .1025 | | |
| .402 | | | .0024 | | | | | | |
| .418 | | | | | | | | | .0350 |
| .497 | -.0147 | | | | | | | | |
| .503 | | | | | | | | .0824 | |
| .550 | | | | .2873 | .0840 | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL47)

ALPHAO( 6) = 3.472 BETAO ( 1) = -4.227

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .565 | | | .2497 | | | | | | |
| .600 | | | | | | | .0620 | | |
| .637 | | .2787 | | | | | | | |
| .650 | | | | | | .0658 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .3557 | | | | |
| .725 | | | | .4620 | | | | | |
| .730 | | | | | | | | | -.0884 |
| .750 | | | | | | .1906 | -.0614 | | |
| .760 | | | .3514 | | | | | | |
| .775 | | | | .5661 | .4867 | | | | |
| .798 | | .1845 | | | | | | | |
| .808 | | | .4876 | | | | | | |
| .834 | -.0218 | | | | | | | | |
| .839 | | .2586 | | | | | | | |
| .850 | | | | .3852 | .3661 | .1371 | | | |
| .857 | | | .2621 | | | | | | |
| .862 | | | | | | | | -.1152 | |
| .865 | .0898 | | | | | | | | |
| .879 | | .1019 | | | | | | | |
| .900 | .0411 | | | .2221 | | | -.0801 | | |
| .905 | | | .0869 | | | | | | |
| .919 | | -.0138 | | | | | | | |
| .950 | | | | .0858 | .1099 | .0590 | | | |
| .953 | | | -.0199 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.0984 | | | | | | | | |
| 1.000 | | | -.1715 | | -.2253 | | -.1831 | | |

ALPHAO( 6) = 3.475 BETAO ( 2) = .017

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0178 | -.0401 | .2927 | .7187 | .7140 | .7098 | .7148 | .1073 | |
| .010 | -.0172 | .0135 | .2851 | .2011 | .1528 | .2451 | .3081 | | |
| .020 | -.0279 | .0189 | .2417 | .0932 | .1748 | .1646 | .1380 | .1098 | |
| .040 | | .0145 | .1081 | | | | | | |
| .050 | .0184 | | | .0320 | .0871 | .0981 | .1109 | | |
| .069 | | | | | | | | .0931 | |
| .080 | | | | .0143 | | | | | |
| .081 | | | .0129 | | | | | | |
| .086 | | -.0034 | | | | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL47)

ALPHA(' B) = 3.475 BETA(' 2) = .017

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2980 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .094 | -.0589 | | | | | | | | |
| .150 | | | | .0399 | .0405 | .0738 | .1013 | | |
| .157 | | | | | | | | .0795 | |
| .163 | | .0611 | | | | | | | |
| .177 | | | .0423 | | | | | | |
| .229 | .0074 | | | | | | | | |
| .246 | | .0423 | | | | | | | |
| .250 | | | | .0762 | .0619 | .0661 | .0866 | | |
| .274 | | | .0308 | | | | | | |
| .345 | | | | | | | | .0617 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .0660 | | | | | | | |
| .400 | | | | .2061 | .0797 | | .0711 | | |
| .402 | | | .2452 | | | | | | |
| .418 | | | | | | | | | -.0325 |
| .497 | .0507 | | | | | | | | |
| .503 | | | | | | | | .0401 | |
| .550 | | | | .3080 | .2831 | | | | |
| .565 | | | .2749 | | | | | | |
| .600 | | | | | | | .0617 | | |
| .637 | | .2579 | | | | | | | |
| .650 | | | | | | .2635 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .4278 | | | | |
| .725 | | | | .3598 | | | | | |
| .730 | | | | | | | | | -.1511 |
| .750 | | | | | | .2932 | -.0188 | | |
| .760 | | | .1998 | | | | | | |
| .775 | | | | .4898 | .5167 | | | | |
| .798 | | .0730 | | | | | | | |
| .809 | | | .2860 | | | | | | |
| .834 | -.0880 | | | | | | | | |
| .839 | | .1228 | | | | | | | |
| .850 | | | | .2845 | .2977 | .1468 | | | |
| .957 | | | .1278 | | | | | | |
| .9[illegible] | | | | | | | | -.0988 | |
| .955 | .0138 | | | | | | | | |
| .[illegible] | | .0043 | | | | | | | |
| .900 | -.0279 | | | .1340 | | | .1219 | | |
| .[illegible] | | | .0008 | | | | | | |
| .[illegible] | | -.0897 | | | | | | | |
| .[illegible] | | | | .0128 | .0319 | .0348 | | | |
| .953 | | | -.0809 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1184 | | | | | | | | |

ARC97-019 1A81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL47)

ALPHAO( 8) = 3.475 BETAO ( 2) = .017

SECTION ( 1 LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| 1.000 | | | -.1922 | | -.2175 | | -.1847 | | |

ALPHAO( 6) = 3.480 BETAO ( 3) = 3.492

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.1092 | -.0915 | .1975 | .5894 | .6019 | .6074 | .5970 | .0555 | |
| .010 | -.0870 | -.0650 | .2385 | .1830 | .1891 | .2317 | .2624 | | |
| .020 | -.0876 | -.0241 | .2216 | .1309 | .1936 | .1576 | .1229 | .0727 | |
| .040 | | -.0088 | .1396 | | | | | | |
| .050 | -.1241 | | | .0596 | .0743 | .0899 | .0958 | | |
| .069 | | | | | | | | .0643 | |
| .080 | | | | .0217 | | | | | |
| .081 | | | .0448 | | | | | | |
| .086 | | .0235 | | | | | | | |
| .094 | -.0764 | | | | | | | | |
| .150 | | | | .0390 | .0519 | .0735 | .0958 | | |
| .157 | | | | | | | | .0575 | |
| .163 | | .0947 | | | | | | | |
| .177 | | | .0365 | | | | | | |
| .229 | .0027 | | | | | | | | |
| .246 | | .0538 | | | | | | | |
| .250 | | | | .1227 | .0851 | .0861 | .0869 | | |
| .274 | | | .1431 | | | | | | |
| .345 | | | | | | | | .0669 | |
| .362 | .0000 | | | | | | | | |
| .390 | | .1652 | | | | | | | |
| .400 | | | | .2837 | .2880 | | .1270 | | |
| .402 | | | .2668 | | | | | | |
| .418 | | | | | | | | | -.1030 |
| .497 | .1271 | | | | | | | | |
| .503 | | | | | | | | .0756 | |
| .550 | | | | .2373 | .2509 | | | | |
| .565 | | | .2289 | | | | | | |
| .600 | | | | | | | .2183 | | |
| .637 | | .2135 | | | | | | | |
| .650 | | | | | | .2389 | | | |
| .670 | | | | | | | | .0000 | |
| .700 | .0000 | | | | .2870 | | | | |
| .725 | | | | .1890 | | | | | |
| .730 | | | | | | | | | -.2445 |
| .750 | | | | | | .1817 | .0989 | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL47)

ALPHA( 6) = 3.480 BETA0 ( 3) = 3.492

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3640 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .760 | | | .0221 | | | | | | |
| .775 | | | | .3175 | .3834 | | | | |
| .798 | | -.0537 | | | | | | | |
| .808 | | | .1045 | | | | | | |
| .834 | -.1383 | | | | | | | | |
| .839 | | .0053 | | | | | | | |
| .850 | | | | .1135 | .1557 | 0383 | | | |
| .857 | | | -.0149 | | | | | | |
| .862 | | | | | | | | -.0018 | |
| .865 | -.0554 | | | | | | | | |
| .879 | | -.0410 | | | | | | | |
| .900 | -.0757 | | | -.0039 | | | .0177 | | |
| .905 | | | -.0915 | | | | | | |
| .919 | | -.1119 | | | | | | | |
| .950 | | | | -.0941 | -.0704 | -.0541 | | | |
| .953 | | | -.1364 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1307 | | | | | | | | |
| 1.000 | | | -.2127 | | -.2140 | | -.1884 | | |

ALPHA0( 7) = 6.220 BETA0 ( 1) = .042

SECTION ( 1)LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | 2990 | .3040 | .4270 | .5340 | .6730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .000 | -.0514 | -.0365 | .3039 | .7484 | .7528 | .7570 | .7434 | .1394 | |
| .010 | -.0398 | .0168 | .3147 | .2547 | .2928 | .3620 | .3999 | | |
| .020 | -.0323 | .0273 | .2704 | .1537 | .3008 | .2740 | .2519 | .1898 | |
| .040 | | .0266 | .1383 | | | | | | |
| .052 | .0238 | | | .1174 | .1345 | .1822 | .2125 | | |
| .069 | | | | | | | | .1524 | |
| .080 | | | | .1158 | | | | | |
| .081 | | | .1351 | | | | | | |
| .086 | | .0429 | | | | | | | |
| .094 | -.0058 | | | | | | | | |
| .150 | | | | .1237 | .1433 | .1615 | .1957 | | |
| .157 | | | | | | | | .1378 | |
| .163 | | .0894 | | | | | | | |
| .177 | | | .1099 | | | | | | |
| .229 | .0012 | | | | | | | | |
| .246 | | .0788 | | | | | | | |
| .250 | | | | .0915 | .1440 | .1679 | .1744 | | |
| .274 | | | .0582 | | | | | | |

ARC97-019 IA81 LVAP(ALLHL SEALED) LEFT WING BOT. (RETL47)

ALPHA0( 7) = 6.220 BETA0( 1) = .042

SECTION 1 (LEFT WING BOTTOM DEPENDENT VARIABLE CP

| Y/BW | .2990 | .3840 | .4270 | .5340 | .8730 | .7800 | .8870 | .9720 | 1.0000 |
|---|---|---|---|---|---|---|---|---|---|
| X/CW | | | | | | | | | |
| .345 | | | | | | | | | |
| .362 | .0000 | | | | | | | .1255 | |
| .390 | | .1319 | | | | | | | |
| .400 | | | | .3689 | .2620 | | .1680 | | |
| .402 | | | .3549 | | | | | | |
| .418 | | | | | | | | | |
| .497 | .1284 | | | | | | | | -.0818 |
| .503 | | | | | | | | | |
| .550 | | | | .3784 | .3854 | | | .1106 | |
| .565 | | | .3604 | | | | | | |
| .600 | | | | | | | .2075 | | |
| .637 | | .3384 | | | | | | | |
| .650 | | | | | | .3767 | | | |
| .670 | | | | | | | | | |
| .700 | .0000 | | | | | | | .0000 | |
| .725 | | | | | .3645 | | | | |
| .730 | | | | .3017 | | | | | |
| .750 | | | | | | | | | -.2529 |
| .760 | | | | | | .2699 | .2100 | | |
| .775 | | | .1587 | | | | | | |
| .798 | | | | .4948 | .5108 | | | | |
| .808 | | .0582 | | | | | | | |
| .834 | -.0785 | | .2455 | | | | | | |
| .839 | | .0908 | | | | | | | |
| .850 | | | | .2619 | .2874 | .1114 | | | |
| .857 | | | .0933 | | | | | | |
| .862 | | | | | | | | | |
| .865 | .0088 | | | | | | | .0579 | |
| .879 | | -.0256 | | | | | | | |
| .900 | -.0591 | | | .1140 | | | .0769 | | |
| 905 | | | -.0238 | | | | | | |
| .919 | | -.1024 | | | | | | | |
| 950 | | | | -.0020 | .0215 | .0062 | | | |
| .953 | | | -.0991 | | | | | | |
| .955 | | .0000 | | | | | | | |
| .965 | -.1340 | | | | | | | | |
| 1.000 | | | -.2104 | | -.2434 | | -.1812 | | |